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ABSTRACT

The experiences and observations of five linking agents and three agency supervisors working for six agencies on a shared project are presented in this report. The linking agents served from three to six schools each as the schools participated in a 3-year project sponsored by the National Institute of Education to encourage local school collaboration in educational innovations using the results of research. This report consists of an introduction by the project director, Richard C. Harris, describing the Research and Development Utilization Program and The Network's role as one of seven project contractors; seven papers discussing the project and the linking agents' part in it; and an appendix presenting the essential activities of linking agents as agreed to by the different agencies providing agents for the project. The papers and their authors are as follows: "Site Selection: A Review of the Process Used in Washington," by Beverly Vifian; "Training: Testing Assumptions about Trainers and Trainees," by Lana Rahn; "Beyond Decision Making: Helping Schools during Implementation," by Leslie F. Hergert; "Disengagement," by Nancy Dannenberg and Margaret Robinson; "On-the-Job Learning, Training, and Support for Linking Agents in the Consortium Project," by Carol Johnson and Diane Lassman; "The Consortium in Action: Some Perspectives," by Harry W. Osgood; and "Esoterica Disseminationem: Looking for Patterns in the Linking Agent's Role," by Richard C. Harris. The first four papers deal with the role of the linking agent at different stages in the project process, and the remaining three consider the context in which the linking agent works. (PGD)

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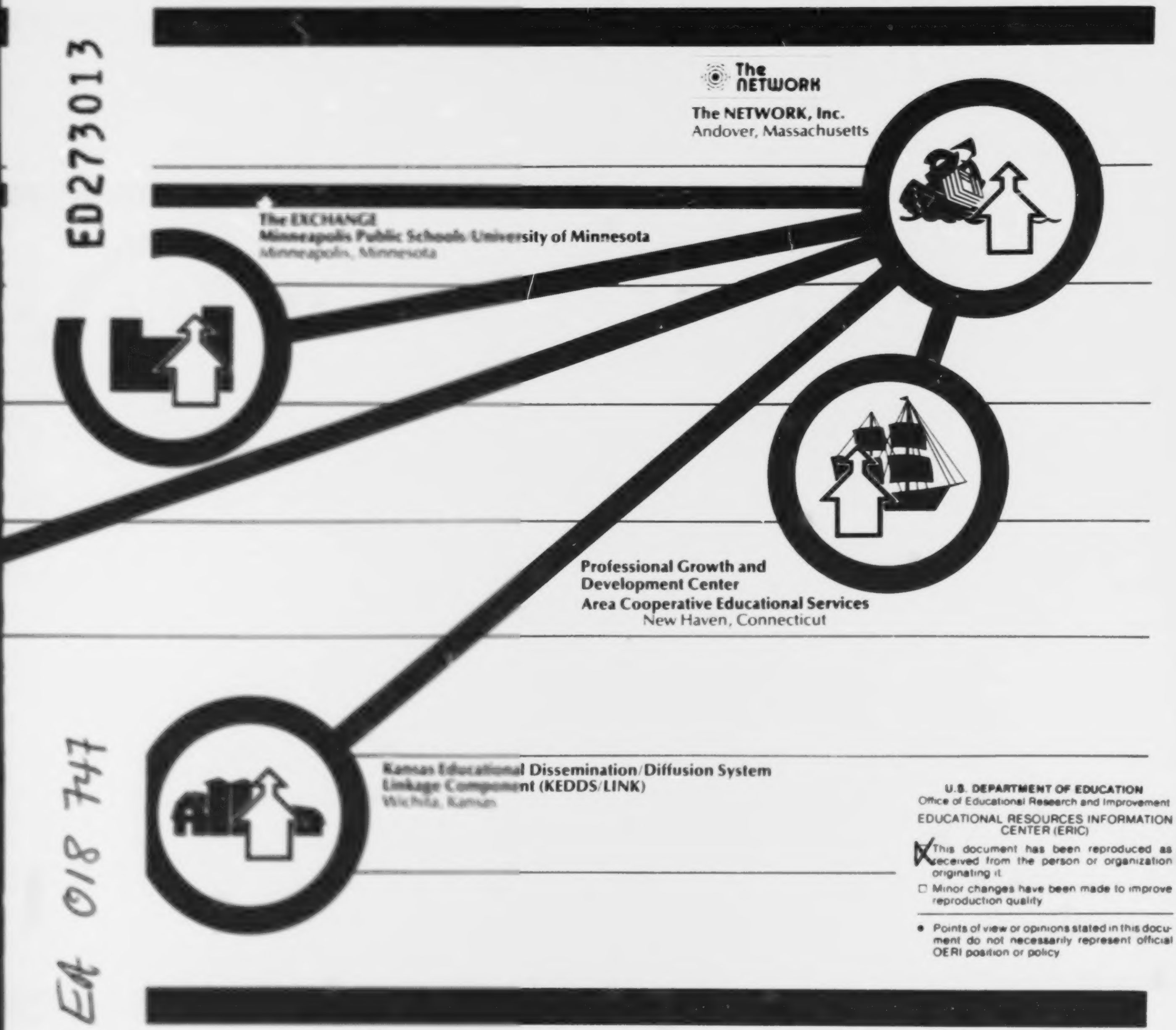

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CONSORTIUM REPORT SERIES:

REFLECTIONS ON THE EXPERIENCE OF EDUCATIONAL LINKING AGENTS

THE RESEARCH & DEVELOPMENT UTILIZATION PROGRAM

Overview

In 1976 the National Institute of Education sponsored a multi-year program designed to help schools take better advantage of educational research and development. The NETWORK, Inc., working with subcontracts to

Far West Laboratory for Educational
Research and Development
San Francisco, California

KEDDS/LINK System
Wichita, Kansas

Yakima Public Schools
Yakima, Washington

Area Cooperative Educational
Services Center
New Haven, Connecticut

The Minneapolis Public Schools/
University of Minnesota
Teacher Center
Minneapolis, Minnesota

was one of seven RDU contractors. Although the seven RDU projects were chosen to represent a variety of strategies for working with schools, each project's overall approach shared the following features:

- Direct assistance to staff and community members
- Linking agents to coordinate services and work with select staff
- Team problem solving among local teachers, administrators, and others
- Access to services and resources from several sources
- Individual project documentation and research

The Consortium Project

Linking agents, housed in each of the subcontracting agencies and at The NETWORK, worked directly with the faculty and administration in thirty schools for a three year period. The linking agents followed a sequential problem solving model which resulted in groups at each school defining problems, developing criteria for reviewing potential solutions, selecting and implementing new programs, and evaluating outcomes.

Staff members in the Project's Linker Support Component provided each linker with resources, training, and consultation at regular intervals throughout the life of the project. At the same time members of the Research Component, using case studies, documented and analyzed activities at all levels of the project -- school, linking agency, interagency. The products of The Consortium were developed by one of these two components -- Linker Support or Research -- and comprise The Consortium Report Series.

(Continued on inside back cover)

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REFLECTIONS ON THE EXPERIENCE OF EDUCATIONAL LINKING AGENTS

Richard C. Harris, Ph.D.
Editor

A Publication of

The NETWORK

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David Max McConkey, Director

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Preface to the Consortium Report Series

There are several indications that the R&D Utilization Program was a complex undertaking. There have been attempts to help schools become better problem solvers, thereby introducing change as an appropriate response to problematic conditions, and there have been attempts to help schools apply existing R&D. RDU, however, was an explicit attempt to introduce change in schools through group problem solving and the application of existing educational R&D.

RDU was also structurally complex. Rarely, for example, are programs developed that both fund an activity and provide the wherewithal to study it. Typically, contractors and grantees of research projects are told outright that funds are for research purposes and not for operational components of the phenomenon being studied, while service projects and demonstration programs allocate such a small portion of their budgets to evaluation (even broadly conceived) that little by way of findings is produced.

The Consortium Project not only accepted these challenges, it introduced some of its own. Its linking agencies, in addition to being geographically dispersed, were also diverse in their structures, missions, staffing, and orientation to schools. Secondly, there was a deliberate attempt to select schools in each state that reflected a demographic mix, so that we could experiment with linking agent strategies in urban, suburban, and rural settings. Furthermore, schools were selected for participation in the program based on the probability that solutions to their problems would impact on several aspects of school life. Quite obviously, both the project and the RDU program at large have been a rich source of experience for study and reflection.

It is appropriate, therefore, that at the end of such a program there be more than one publication to document the effects of its presence and to provide as many perspectives on the experience as possible. Before commenting on the volumes in the Series, however, I would like to acknowledge the work and the intense involvement of the project's linking agents and their supervisors.

Consortium linking agents were faced with the awesome tasks of not only helping schools introduce curricular improvements, but also of helping to define and implement a new role. In addition they were asked to document their activities to provide the research component of the project with baseline material for developing case studies. To Donna Bellorado, Nancy Dannenberg, Joseph DePaolo, Leslie Hergert, Carol Johnson, Linda McNeely, Lana Rahn, and Beverly Vifian goes a sincere thanks for your energy and your willingness to put yourselves under several microscopes. Thanks also for representing the project in interviews, newsletters, and various professional meetings and forums.

In addition to working with these linking agents I have been fortunate to work with several experienced educators who acted as agency supervisors and subcontract managers for the project. They include James Connett, Diane Lassman, Max McConkey, Norman Oppenheim, Harry Osgood, Ralph Parish, Margaret Robinson, and Keith Wright. On several occasions they were called upon to rise above their individual and agency priorities to act in the best interest of the project, and each time they did.

The Consortium has been characterized as an anomalous collaboration among competing agencies. From my perspective, however, the collaboration was not an anomaly; it was the product of commitment, confrontation, openness, and hard work on the parts of these linking agents and supervisors.

Three of the five volumes in the Series were produced from the Research Component of the project. They evolved from the developmental work of Dennis Collins, acting in collaboration with the research directors of the other six RDU projects. It was this early developmental work that gave shape to the linker's documentation procedures and influenced the variables ultimately reported on in the three publications.

Responsibility for the conceptualization of the school-level studies, Case Studies in Program Improvement, fell to Barry Gold who developed the framework for the studies with case writers Elliott Krause of Northeastern University; Ruth Anne Olson, a private consultant; and John Nickel, Wichita State University. Case research and preparation was also done by Alfred Wilson from Kansas State University and Mary Smith, another private consultant. The cases were designed to describe the project in its first two years at the site. At the end of the third year, epilogues of each case and a cross-case themes chapter were developed by Terrence E. Deal, Holly Gunner, and Martha Stone Wiske of the Harvard Graduate School of Education.

In editing the school-level studies, Christopher J. Drew coordinated the work of eight researchers in three states and regularly mediated conflicts between the researchers and the linkers under study. I am convinced that the cases are enlightening and the cross-case analysis compelling because of his active attention to argument and style from the early drafts to the final copy.

In preparing The "Inside" Outsiders: A Study of Three Consortium Linking Agents, Dr. Beverly Loy Taylor (Center for Policy Research, New York City) inherited a partially conceived conceptual framework, a great deal of already collected data, and an incredibly tight timeline. Rather than complain, she dug in: tightened the framework, found and filled gaps in the data through interviews, observation, and extensive document analysis, and stuck to her timeline. As project director, I was pleased with her thoroughness; as a professional, I am impressed with her monograph.

Chris Drew also conducted his own research within the project. His publication, The Consortium Project: A Study of Interagency Collaboration, is a description and analysis of the project itself and is based on his observations of the project in action. His interviews of me, conducted at intervals throughout the project, I found to be thought-provoking and professionally challenging. What he was able to use as data, I was able to take as feedback, and I believe that both of us benefited from the interactions. I certainly did.

Two project central staff took responsibility for providing several types of resources to linking agents. Peter Gardner and Susan Harris planned training events, conducted meetings, circulated information, and provided ongoing contact with the linkers. Their early work, providing resources related to specific aspects of the linker's role, created the prototype Linking Agent's Tool Kit, a collection of articles and resources. John J. Ford, III and Leslie Hergert accepted the responsibility to make the Tool Kit more generic. In the process, they have considerably upgraded the original set of resources and have added important substantive comments on the linker's role.

The Reflections book is our attempt to let project staff tell their own story. In addition to the story that unfolds, the articles also demonstrate that linking agents, like any group of practitioners, can play an important role in developing and sharing understandings about their experience. The writers represented in the book deserve credit for their willingness to think about their experiences and put forth their own analyses for public consideration and scrutiny. In editing the book I was fortunate to have the benefit of the editorial skill of Joan Wilson who worked directly with the paper writers on matters of clarity and style.

The Consortium has relied on the administrative support of a number of people over its three year history including Claire Durocher, Nina Demeritt, Nancy Lund, and Zeina Azzam, who had the massive task of coordinating production of this series. In addition, we have had extensive technical support from Paula McCarron and David Pelletier of The NETWORK's Product Development Division, and from Richard Emery, a free-lance graphic artist.

I would also like to thank Thomas S. Israel of the National Institute of Education for his support throughout the life of the program and for his responsiveness and flexibility at times when our problems had no apparent solution.

One final note on the subject of contributors to the welfare of the project: in addition to the counsel and commentary of the aforementioned people, I have also had ongoing access to David P. Crandall, Executive Director of The NETWORK, who from the start of the project has made available his professional knowledge of research utilization and his experience in project management. His support has been invaluable and his influence on me over the years has been profound. I can only hope that the reports in this Series will reflect his high standards and his tireless quest to make NETWORK publications a contribution to the future, not a rationalization of the past.

For those of us who have lived with The Consortium since 1976, the Consortium Report Series will be, no doubt, the tip of the iceberg. We just couldn't get it all into print, and in truth, we didn't try. However, I believe that we've been honest with ourselves -- that we've not invented a tip of a make-believe iceberg -- and hope that there will be a great deal in these publications that others will find of use.

Richard C. Harris, Ph.D.
Project Director

INTRODUCTION

by Richard C. Harris, Ph.D.
Project Director

THE EDUCATIONAL MILIEU - 1979

The passion for reform in education is on the wane, reflecting, perhaps, a more general desire in the country for stability. Slogans abound to try to keep the old fires kindled ("Art is a basic skill"), but the fact remains that an increasing number of Americans appear satisfied with an educational system which is fundamentally the same as the one they grew up in. This satisfaction, some would say "complacency," sits in ironic juxtaposition to a number of unresolved problems: declining enrollments, reductions in staff, accumulating legislative mandates, taxpayer rebellions, and an increasingly uncertain future, to name several.

One wonders if it will take another crisis of confidence similar to the Sputnik crisis to precipitate a new wave of interest in reform. And, if so, will the new interest launch another round of experiments doomed to a fate similar to the last round? Or, is there an alternative? Might it be possible to treat schools as fellow collaborators in an improvement process that will acknowledge all of the multiple pressures on them, yet still help them take advantange of available resources to resolve their problems? One such alternative approach to reform was The National Institute of Education's Research & Development Utilization Program.

THE R&D UTILIZATION PROGRAM

The Research and Development Utilization Program (RDUP) was an attempt to treat schools as fellow collaborators in improvement. It relied on local problem solving groups teaming up with outside linking agents so that there was both readiness for change and appropriate outside resources available to support it.

The RDUP also had a research focus. Seven projects were funded to help answer questions about how extensive the resource base in the basic skills is, the role of linking agents in supporting school improvement, and the value of local problem solving strategies for generating local commitment and sustained involvement.

THE CONSORTIUM

The Consortium project was one of the seven contracts awarded under the RDUP. The NETWORK, a non-profit service and research organization, held the Consortium's prime contract. In addition to coordinating the project activities, The NETWORK also housed one of the six project linking agents. Other linking agents were from an R&D laboratory, an intermediate unit, an SEA-LEA collaborative, a teacher center, and a public school district.

The linking agents in our project worked anywhere from 80% to 100% on the project. The fewest number of schools served by one linking agent at any one time was three; the most, six. The linking agent's supervisor (sometimes the agency director) worked part-time on the project, both in advising the linker and in providing overall guidance to the project.

A diverse group of linking agencies was selected for involvement in the Consortium project so that differences in approach to school improvement could be examined, and the linking agent's experience could be enriched through interaction with other linking agents who might have differing perspectives. An important consequence, however, of creating a project among agencies with no commonly held dogma was that a role description for linking agents was needed that would be acceptable to all participants. As a result, 16 milestones for linking agents were developed and revised during the first year of the project. The milestones originated from the project's central coordinating staff, as did the assumptions that supported them. However, it took a series of four project meetings until all 16 could be ratified. (For a list of the milestones and their supporting assumptions, see Appendix A.)

From the perspective of the project's coordinating staff, rather than providing a schedule of planned activities, the milestones provided a point of departure. They served to focus discussion during planning sessions; they served as an organizer for the central staff when delivering resources to the linking agents; and several linking agents have reported that the milestones gave them a sense of direction and security. But, milestones are linear, and human transactions rarely are; they are general, and the linking agent deals with specifics; they are comprehensive, and, in the real world, there is room for shortcuts. Somewhere between the abstract concepts embodied in the milestone list and the slices of life represented in these papers is the approach that we used in more than thirty schools for a three-year period.

THE PAPERS

With this set of papers, we are attempting to capture the project from the point of view of the linking agents and those closest to the linking agents. Four of the papers deal with the role of the linking agent:

- Beverly Vifian argues that site selection is a process often overlooked and, if overlooked, can undermine future work with the site.
- Lana Rahn recounts several of the initial assumptions and conventional wisdoms about program developers and adopters that she was subsequently forced to rethink as a result of her experience as a Consortium linking agent.
- Leslie Hergert describes the role of the linking agent during the implementation period and the assistance needs of the school district involved in implementation.
- Nancy Dannenberg and Margaret Robinson write about the process of disengagement and the effect that early planning can have on transferring program responsibility to the school.

Although the most consuming aspect of the project's work was the linking agents' work with sites, another component of the project was directed toward provision of support to linkers.

- Carol Johnson and Diane Lassman (a linking agent and agency supervisor, respectively) analyze the various types of support that were provided.
- Harry Osgood's paper looks at contextual features that influenced the Consortium and more generally, the way that education is in a constant state of change. Included in this paper is the provocative notion that successful adoption of a program might include a plan for its rejection once it has served its purpose.
- In my own paper, I have the task of trying to explain how, in a time when public confidence in federal intervention into anything is continuing to decline, we could have had such a successful program.

THE AUDIENCE

The question of who should read this book is probably best answered by saying that the book is for anyone who is intrigued by the title, because, as the foregoing description of the papers should have suggested, the papers are a set of reflections. There is no prescription here for linkers of the future, only a reflection on the past. There has been no intention to be comprehensive, only to let the participants in the program write from their experience with it. Like any mosaic, this set of papers is probably best viewed from a distance and with some perspective: looking too closely will certainly reveal the chinks in the mortar. On the other hand, there is some value in writing when the experience is fresh and not exhaustively analyzed. When it is fresh, there is room for the reader to read from it selectively, but learn from it immediately.

Readers with experience in process consultation and organizational development may be surprised to see in these papers several of their theories-in-use in use under the moniker of linkage. Other readers who have been trying to limit the term "linkage" to descriptions of resource accession and delivery will be, perhaps, appalled at the number of times our linkers actively intervened in the workings of the schools that they served. Our underlying hope, however, is that those people with a resource base in search of a problem or a problem in search of a resource base will find in these papers an idea or two, a strategy worth trying, and, if it's not too much to hope for, a sense of encouragement.

Site Selection: A Review of the Process Used in Washington

Beverly Vifian began her career as an elementary school teacher in the Yakima Public Schools in 1969, and became the Teacher/Coordinator of the Study Center for Creatively Talented Students. She earned her Master's degree in education, specializing in supervision and curriculum. In 1975, Ms. Vifian became the Dissemination Specialist for the State Facilitator Project. Since June 1976 she has been the Consortium Project's Washington Linking Agent in the Yakima Public Schools, and worked with schools in Spokane, Bellevue, Vancouver, and Yakima.

by Beverly Vifian
Yakima Public Schools

"Had I known what I know now, I would never have agreed to work with this site." "It became apparent that the staff of this school had no idea why they had ever been selected." "The school dropped out of the program as soon as they realized that they weren't going to be able to 'take the money and run.'" Such have been the comments of linking agents participating in a variety of projects throughout the country regarding the selection of schools, particularly when, for one reason or another, a school failed to achieve desired outcomes.

Site selection is an obvious first step in the adoption and implementation of innovative educational programs, but it can easily be the step that is treated the least methodically. Several reasons may account for this lack of consideration.

First, as was true of the Consortium project, federal requests for proposals (RFPs) often require that people and sites to be involved in this project be named at the time the proposal is submitted. Because of this requirement, it is often impossible to spend the amount of time necessary for proper site identification; consequently the decision must often be made based on inadequate information (e.g. recommendations, past performance), rather than on a careful and thorough personal approach.

Second, the site selection process may suffer because of the sense of need in the initial stages to get a massive research project visibly underway. For example, at the end of the first three months, such questions as "you mean you still don't have a site?" may cause guilt, embarrassment, or both.

Third, the seeming lack of information about or models for the sufficient and effective selection of sites may discourage a large investment of time and effort in this first step.

All district sites in the six-state Consortium were selected prior to the beginning of the project. In most states, the individual school sites were also selected at that time. In my state, however, the selection of the individual school sites was postponed until after federal funding was granted and additional information pertinent to site selection was available.

In the remainder of this paper, I will describe (1) the site identification process used in the Washington Consortium project, (2) the advantages of the process, and (3) the disadvantages of the process.

WASHINGTON SITE IDENTIFICATION PROCESS

As stated earlier, the school districts in Washington were selected prior to program commencement; the individual schools, however, were chosen after funding had been granted when more information was available. The factors affecting the district selection and the procedures used for school selection are described in the sections below.

Preliminary Selection of Participating Districts

It is difficult to obtain information about a district's potential for and attitudes about educational change without being able to observe and question -- i.e., without having an inside position. In other words, a kind of "Catch 22" situation exists for a linking agent in the fact that to know whether or not it is advisable to "gain entry" to a school district, it is necessary to have already "entered" that district.

Because of this dilemma, districts were selected on a temporary, exploratory basis, until mutual interest and understanding could be attained. Preliminary district identification was made using the following information:

1. Consortium Program Criteria --

   The following guidelines for site selection were stipulated by the RFP:

   a. Geographical distribution,

   b. A recognized need in the area of reading,

   c. Indication of a desire for help in addressing the need,

d. Demonstration of willingness to support a new program,

e. Multiethnic, multiracial, or economically or culturally deprived (Title I),

f. Elementary schools.

As an initial step of involvement (and, as required by the RFP), each district submitted a letter specifying a need for improvement in reading programs and a desire to participate in the Consortium project. At the time the federal contract was awarded, I met with the district contact personnel to review the scope of the project and ensure that it was suited to the district's needs.

2. History of Involvement in and Support of Change --

The director of my agency was responsible for additional dissemination projects within the linking agency, among them, the National Diffusion Network (NDN) State Facilitator Project, the Project Information Packages (PIP) Program, and the Washington State Diffusion Project. Through these ongoing projects, information was available regarding the interest and involvement of districts in adopting exemplary programs. Each district selected had demonstrated wide interest in these opportunities, and, in each case, an exemplary project had already been adopted within the district.

3. Administrator Contracts --

To some extent, districts were selected within the linking agency, because of previous involvement in other dissemination projects. These people, who had significant decision-making responsibilities within the district, served as the initial contacts. This relationship facilitated entry into the district and eventually expedited the process of establishing the personal credibility of the linking agent and agency with other key administrators.

Site Selection at the School Level

The procedures outlined below generally describe the school identification process used in each district. The time invested in each phase varied depending on the circumstances and needs of the districts, schools, and individuals involved. Anecdotal information will be used to illustrate how each state was handled in various situations.

1. Identification of the Area and Level of Need --

   The first step of the process involved a review of needs (and needs assessment) at the district level. The personnel involved at this stage usually included myself, curriculum directors, and other administrators.

   In one case, where my initial administrative contact person was the Title I director, the decision to focus on Title I elementary schools was made unilaterally and quickly because of obvious needs. In another district, the assistant superintendent, reading consultants, and area directors participated in the identification of the predominant need and the level at which attention should be concentrated (i.e., junior high, Title I, non-Title I).

   In the majority of situations, this decision was made fairly rapidly because information was readily available through district-wide (and in some cases community-wide) needs assessment activities, and, in effect, it was necessary only to confirm the obvious.

   In another situation, however, where the needs were very diverse, it was necessary to spend considerable time gathering data and meeting with various interest groups, such as administrators of the junior high program, the bilingual program, and the elementary reading program. In this district, I spent considerably more time meeting with groups and interviewing individuals so that a well-informed site selection decision could be made.

2. Identification of Program Personnel and Clarification of Relationships --

   Once the target group (e.g., Title I schools, junior high schools) had been selected, it was necessary to determine who would be the major contact person. This person would work closely with the linking agent to identify other key personnel who would need either to be involved or informed and to devise a plan for their involvement or for the transfer of information to them.

The new contact people were selected by the original administrative "entry" contact people according to the appropriateness of their district responsibilities. It was with these new contact people that I worked primarily. In two cases, the district reading consultants were selected as contacts; in another, the director of curriculum was selected. Eventually, the principal evolved as the logical major contact person in two situations. In these cases, I kept the central administrative contact informed through periodic reports, memos, and conferences.

The target group itself indicated logical relationships. For example, where the junior high school program was identified, the curriculum director at this level was regularly informed and often involved in Consortium activities.

In terms of developing a beneficial working relationship, it was important to understand at the beginning the established operating procedures of the district, as well as the expected procedures for outside consultants. For example, at one point in the project when the district contact person was unable to get the needed support from higher administration, I suggested that my intervention would perhaps be helpful. It was tactfully, but directly, explained to me that any communications I might have with other administrators would require an introduction (screening) by my contact people. To approach others directly would endanger not only my credibility, but that of my contact person.

It is also important to get a feeling for the existing "power structure" of the district. For example, in another situation, where I was attempting to gain strategic assistance for the project from an administrator whom I had considered relatively important, I was told in essence, "I'll tell you what I think needs to be done, and who needs to be impressed, but if I come out visibly backing this program, it will be less likely to succeed." This was obviously helpful information, but it was almost too late -- we were well into the first year of the project. The ability to identify the level of influence of major contact persons in the early stages of involvement will greatly assist the linking agent in establishing his/her most appropriate role for providing maximum assistance, or, in making a decision about whether continued involvement is likely to be productive.

Thus, the success of the linking agent's effort at the district level may ultimately be limited by the credibility of the contact persons within the district and the agent's sensitivity to the operating procedures within the district.

3. Awareness Process for the Target Group --

Once the target group had been identified at the district level, an attempt was made to inform the principals and teachers within this group of the opportunities available to them through the Consortium project. This communication was accomplished through large group district level presentations by the linking agent and/or district contact personnel, printed information, and presentations to school staffs or their representatives.

The amount of time spent familiarizing principals and teachers with the goals of the Consortium varied depending to some extent on the size or general interest of the target group. For example, in one district, a single awareness meeting for all Title I principals was sufficient. In another, the awareness process was extended and more comprehensive, consisting of:

- Linking agent presentation to the district curriculum department,
- Linking agent presentation to the full district administrative staff,
- Printed information sent to all principals,
- Linking agent meetings with interested individual principals, and
- Linking agent (and district contact person) presentations to individual school staffs who indicated interest.

4. Requests for Response --

At the conclusion of the awareness stage, all of the schools within the target group were invited to complete a brief application for involvement in the Consortium project. Generally, the application was designed to elicit the following:

- A statement of need, or a description of areas of concern with the reading program,
- An appraisal of the school staff's interest in and commitment to involvement, and
- A description of past and current efforts for improvement of the reading and/or other school programs.

District Consortium contact personnel or committees formed at their discretion reviewed the applications and made a tentative selection.

5. Staff Interviews --

Although staff interviews were originally intended to be the first step of the school problem identification process, we incorporated them as the final stage of the site selection process. Even though it was fully expected that the tentative selection would indeed become the final selection, the process of allowing the staff members to appraise the situation through confidential interviews with the linking agent enabled the intended participants to confirm the selection rather than having the selection imposed on them. It also allowed them to reject the program for whatever reason they might have had.

In addition, the interviews produced more accurate information regarding the staff's motivation for involvement and allowed me to clarify with individuals possible misconceptions regarding project goals.

ADVANTAGES OF THE PROCESS

When a linking agent enters a district, the information s/he has is probably fairly general. For example:

- The school board has publicly stated that improvement of the reading program is a high priority,

- A district-wide committee of parents and teachers have identified several goals for improving the reading program,

- Secondary school principals have recognized a need to modify the reading program at this level.

Even if more specifics are believed to be known, they are often unconfirmed. For example, I had heard that the staff at one elementary school were eager to be involved and would commit time outside of school hours to work on solving the reading problems that existed there. Although I received this information directly from my contact person, the Assistant Superintendent of Curriculum (who got it from the principal), when I visited the elementary school, I found an eager principal and a very unreceptive staff.

Obtaining information pertinent to the process of effecting successful program improvement is problematic: What is the most reliable source? Who is appropriate to approach? Who is approachable? What is the procedure? What if I find out that the school that has been selected simply was an impossible choice?

The site selection stage provides the time not only to identify a school where success is probable, but also to better understand the characteristics of the district that will affect the change process. The significant value of a systematic site selection process is the provision of time. This allows the linking agent to evaluate information and to relate it to actual situations and attitudes held by both teachers and administrators, keeping in mind that teachers and administrators are not always in agreement -- nor are they always aware of their divergent interests. The process, then, provides time to:

- Analyze the level and importance of district commitment;

- Introduce the project so that those who will ultimately be involved clearly understand what it is they are committing themselves to, and the circumstances that provided the opportunity;

- Determine the likelihood of individual school commitment to change;

- Analyze the relationship between the individual school and the district central office;

- Analyze possible discrepancies between what educators say ought to be and what is likely to happen;
- Allow those who will be involved to decide to be involved and, hence, increase the likelihood of success;
- Establish credibility; and
- Allow the linking agent to synthesize information and, in conjunction with district personnel, perhaps recommend withdrawal, suggest redirection of effort, or confirm the original intent for involvement.

Obviously, it is impossible to spend the amount of time necessary to fully understand the complexities of a district. However, it seems that through observation and the establishment of relationships that occur as part of the process of selecting the school site carefully, not only does the linking agent have the opportunity to evaluate his/her ability to work effectively with the site, but of equal importance, the district personnel have the opportunity to decide whether such an endeavor would be sufficiently beneficial to them to warrant the required effort on their part.

To some extent, the value of a systematic process may be better viewed in terms of the possible consequences of not using such a method. Although a more random selection process will not necessarily predetermine program failure, it would seem that a careful and methodical approach to selection may be a means of avoiding the following:

- Resentment and suspicion -- "why were we chosen?";
- Loss of time and efficiency because of a lack of information;
- Noncooperation on the part of the school or district;
- Early withdrawal of the school from the project;
- Ultimate lack of financial support and encouragement after decisions are made;
- Worsening of school/administrative relationships;
- Reduced possibilities for future involvement in program improvement; and
- Damage to the credibility of linking agent and the agency.

DISADVANTAGES OF THE PROCESS

A significant disadvantage to the site selection process I used was the length of time required for this initial step -- it did not get done quickly. It took from 6 to 10 weeks before all four of the school sites were selected. Perhaps the worst effects of this at the time were the sense that I was falling well behind my counterparts in the other five states in the decision-making process, and my growing apprehension that by the time sites were identified it would be too late to make significant progress in the first year of the project. But, as it turned out, by the end of the first year the Washington schools had "caught up" with those schools in other states where a more arbitrary and less time-consuming process had been used. One reason that I did not fall behind permanently may be that some of the relationship building and problem clarification that is a part of the decision-making process had been handled at the site selection stage enabling the actual tasks of problem identification and selecting appropriate solutions to be accomplished more rapidly than might otherwise have been expected.

It is also possible that in the other states schools that were unclear about why they had been selected (or whether they wanted to be) may have had to rethink the decision and start again.

If the site selection process, however, takes much longer than 4 to 6 weeks, I feel there is a real danger that either interest will be lost, or if visible progress cannot be seen quickly, a sense of discouragement may set in and involvement in the change process may ultimately be rejected. Indeed, teachers involved in the decision-making process were not hesitant to indicate their dislike of a long and drawn-out process to reach a solution that had little hope of being implemented. They had "been there before."

Another possible drawback may be the potential alienation of schools whose proposals for involvement in the project were ultimately rejected. When schools compete in this way, an obvious advantage is their position to nominate themselves for participation. At the same time, it is important that those who were not selected be provided opportunities to maintain their interest in and state of readiness for improvement.

For example, in one of my districts where three or four schools submitted proposals, I am unsure how the rejected schools reacted to the fact that they were not chosen or what effect this has had on their willingness to be involved in future change opportunities.

This situation might be handled by referring them to alternative agencies (e.g. the State Facilitator Program or Title IVC support programs), which may be able to help them address their specific concerns. Or the linking agent can simply provide updates on project progress on a regular basis and involve the schools in relevant project activities wherever possible. At any rate, the interest and effort indicated through self-nomination should be in some way rewarded and nurtured, regardless of whether or not the schools were actually selected.

Finally, a possible disadvantage to this site selection process may be that potentially supportive and successful districts or schools may be frightened away by a process that appears to be abnormally demanding, cumbersome, and time consuming. The linking agent must be able to gauge when the process has begun to work against its original objective and consider each site on a case-by-case basis. If a well-informed site selection decision can be made without following through on all steps in the procedure outlined earlier, the procedure should be abandoned at that point.

SUMMARY

Just as it is logical that the educational problem must be understood before a new program can be recommended, it is logical that school personnel must understand a proposed project before they can know whether they want or can be involved. The linking agent must also become well enough informed about the site to assess accurately whether there is a "match" between the site needs and the project goals.

It appears that the site selection step is the logical point at which to seek this information -- before either Consortium or site personnel make a commitment. It seems far more useful to obtain information regarding the likelihood of success at this point where a decision to withdraw can be more logically, unemotionally, and mutually reached, than to find that the situation will not work after many people have invested time, commitment, and trust in the belief that their work would result in visible improvement.

Through the relationships that were developed during the methodical selection procedure, the linking agent was able to gain acceptance and trust within the district as a member of the group, and consequently, potential barriers to successful intervention were more easily recognized and discussed, and effectively dealt with, presumably increasing the likelihood of innovation. At least the process did not seem to have detrimental effects. The sites selected in this way have remained involved throughout the 3-year project. Not only have they experienced success through the reading program that they have adopted, they have also been actively involved in sharing their success with others within their respective districts as well as with other districts within the state.

Training: Testing Assumptions About Trainers and Trainees

Lana Rahn's background in educational research and development includes positions as Assistant in Research at Yale University, and later, Director of Research at the Hamden-New Haven Cooperative Education Center. From 1975-1977, she coordinated the Expanded Early Learning Model for the Area Cooperative Educational Services (ACES) in New Haven and was an evaluation consultant to the Title I program in West Haven, Connecticut. Ms. Rahn received a Master's degree in School Psychology in 1977. She has served as the Connecticut Linking Agent for the Consortium at the Professional Growth and Development Center within ACES since 1977.

by Lana Rahn
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One of the primary responsibilities of the linking agent in the Consortium project was to act as a liaison between program developers and program adopters in applying educational research on exemplary practices in the public schools. The services provided by the Consortium linking agents were advantageous to both the developers and the adopters.

For school personnel, the potential adopters of exemplary programs, it was no longer necessary to search hit-or-miss for programs that might meet their needs. Nor was it necessary to wait until a class, conference, or seminar was offered locally. The linking agent was available to help educators define their needs, select an appropriate program to meet these needs, and provide technical assistance during program implementation. In short, local school districts were no longer forced to find answers to their educational problems alone.

For the program developer, the linking agent assumed much of the burden of matching programs to educational problems and subsequent program dissemination. The linking agent worked with school personnel to assess needs and problems and provide awareness information about programs potentially suited to meet these needs. In fact, because of the linking agent's role, the program developer could postpone contact with the school district until training for implementation took place.

As a novice linking agent, I believed that I would be concerned primarily with the events leading up to program adoption. My original assumption was that the bulk of my energy would be focused on the initial awareness activities, the needs assessment process, the problem definition, and the identification of potential solutions among the various validated reading programs in the resource pool. I thought that once a school had selected a program and the training was arranged, I could step back and let the "professionals," the program developers, take over. In retrospect, I find this not to be the case. Training and post-training activities are key elements in the successful adoption/implementation of a new reading program. Collaborative planning with developers not only must occur prior to the initial training of personnel in a school district, but must also continue through implementation and institutionalization.

On the basis of my experiences as a linking agent with the Consortium, I have explored and challenged some assumptions that I initially held about the training and post-training phases of the adoption/implementation process. During these phases, there is a great deal of interchange among the linking agent, the program developer, and the program adopter. Thus, the assumptions I have explored fall into two categories: assumptions about program developers (trainers) and assumptions about program adopters (trainees). I hope the following discussion will prove useful to future linking agents working with schools undergoing a similar change process.

ASSUMPTIONS ABOUT DEVELOPERS

To ensure the effective implementation of a school improvement program, it is necessary to ascertain the extent to which the program developers can be relied on to perform certain services. I had made a number of assumptions regarding the role of program developers that were later invalidated by my actual experiences. These assumptions and, where appropriate, suggestions for more effective collaboration with program developers are discussed below.

Assumption 1: Because program developers have skills in designing exemplary educational programs, they can teach educators in a new setting how to implement these programs.

Most program developers began as educators who created programs in an effort to improve the quality of education for their students. Some of these programs were validated as exemplary by the Education Division's Joint Dissemination Review Panel. Other developers worked in Research and Development laboratories, and their programs were then field tested in schools. In each case, the developers were responsible for disseminating their programs to schools that demonstrated an interest or need.

In the case of my schools, most of the programs selected for adoptions were designed by developers who were once educators. Consequently, the dissemination process necessitated a role change from a teacher of children to a teacher of adults. In many instances, developers were not prepared for this role change and were found to lack the skills necessary to train adults. Although developers may be able to talk about their program, recounting how it evolved and what it contains, they may not be able to convey a conceptual framework detailing how another school might go about implementing the program. Guidelines have been published that outline, step-by-step, how to package a program for dissemination (Rosenau and McIntyre, 1977); however, program disseminators are not required to adhere to these guidelines. This is not to suggest that program developers cannot be competent trainers; rather, I would recommend that the linking agent not assume this competency when planning for the training.

A linking agent can anticipate problems before the training session begins by observing a training session at the developer site or another adopter site. If this is not possible, the linking agent should contact either other linking agents who have worked with the trainer or other schools that have already undergone the specific training experience. In any case, the linking agent should sit in on the training session at their adopter site to identify any gaps or deficiencies that require further work.

Assumption 2: People involved in dissemination share a common background, hence a similar set of values or goals regarding in-school improvement.

This assumption was quickly proven to be invalid. Contact with program developers leads to the conclusion that such people come from varying backgrounds. For example, if the program developer was previously an educator, did s/he come from a public or private school? Or, is the program developer a second generation trainer (i.e., someone who was not initially involved in program development) who comes from a business environment? Trainers will have a particular bias toward educational innovation depending on their individual backgrounds, and linking agents should anticipate such biases.

When the trainer is the developer of the program, it is reasonable to expect this trainer to have a high degree of ownership for the program, a minimal interest in modifying the program, and a vast number of personal experiences ("war stories") related to the program. This type of trainer might have a different bias than a second generation trainer, someone who was not initially involved in program development. For example, some trainers who are currently on the developer's staff were not on staff when the program evolved. Others are turnkey trainers or adopters who, although not a part of the developer's staff, have developed enough expertise with the program to provide training for new adopters. The second generation trainer, although knowledgeable about the program, may have difficulty generating a sense of program ownership or be unable to anticipate the full range of problems that may arise during the initial implementation stages. Another type of trainer with yet another bias is the commercial publisher, a professional disseminator who carries a franchise to market products for a specified area. S/he provides a very polished training experience but may be more concerned with efficient, profitable distribution of his/her product than successful program implementation.

No data was found that would support the use of one type of trainer over another. However, familiarizing oneself with a trainer's background prior to the training session should enable the linking agent to anticipate and thus accommodate any particular bias.

Assumption 3: Developer/Demonstrators will be available to provide follow-up technical assistance.

No one disputes that the post-training period is a critical phase in the change process (see: Fox et al., 1967; Jung, 1973; Rubin, 1973; Hall et al., 1973; Arnold and Goodloe, 1975; Bolam, 1976; Berman and McLaughlin, 1978; Bert, 1978). It is during this trial implementation period, which may last up to a year, that trainers should be available on request to help reduce teacher apprehension and to help resolve implementation-related problems. Unfortunately, because of other professional commitments, this degree of technical assistance is rarely available from trainers.

In order to anticipate the degree of follow-up assistance to expect, the linking agent should consider the following:

- Is follow-up technical assistance included as a part of the standard service package available from the developer?
- Are a sufficient number of project staff members available to perform training and follow-up services?
- Is the project trainer's ability to provide follow-up assistance limited by other responsibilities or circumstances (e.g., classroom teaching, district travel restrictions)?
- Are people other than the project developers available to provide training and follow-up technical assistance (e.g., turnkey trainers, National Diffusion Network facilitators)?
- Are there other adoption sites in close proximity that might be able to lend assistance during implementation?

The availability of ongoing support should not be underestimated as a factor influencing the eventual success or failure of a school improvement effort. The training and assistance needs of teachers change over time as new problems arise in the classroom and usually cannot be anticipated totally during the initial training session. Adopters need help from developers as their problems arise.

Assumption 4: When preparing a session for training, emphasis is placed on the unique needs of the adopter site.

This assumption implies that the trainer will "know the trainee." While there is abundant evidence that this is a valid goal (see Jung, 1973; Berman and McLaughlin, 1975; Fullan and Pomfret, 1976; Hall, 1978), actual experience indicates that this goal is seldom realized. External factors (e.g., budget restrictions, other training commitments) prohibit trainers from spending the kind of time needed to collect and digest the type of information that will allow them to identify unique needs of the adopter site. In addition, trainers can, at times, be overly attentive to the program itself while ignoring the perceptions and experiences of the people participating in the change process. Realistically, the linking agent cannot expect the trainer to gather data beyond information regarding the individual's expectations about the nature and value of the training experience.

In working with a school prior to program adoption, the linking agent will have generated a great deal of information regarding the local school situation and its unique problems and needs. The linking agent must collaborate with the trainer so that wherever possible, project strategies can be adapted to the specific characteristics of the local school and/or classroom. Research has demonstrated that the more similar training conditions are to the "back home setting," the more likely it is that new skills will be applied (Jung, 1973). My experience indicates that the linking agent must take responsibility for initiating collaborative activity with the trainer to ensure that the training session is designed with the school's characteristics in mind and that the program itself is modified to accommodate the school's resources.

ASSUMPTIONS ABOUT ADOPTERS

When preparing a school for adoption/implementation of a new program, it is necessary to consider the role that the trainee or program adopter will play in the school improvement effort. I entered this stage of the adoption process with some preconceived ideas, which were revised as a result of my experiences during implementation. Hopefully, reassessment of my initial assumptions will prove useful to other linking agents in similar situations.

Assumption 1: School personnel involved in training as a part of a school improvement process want to be involved.

The assumption that no one is against improvement or change can be dangerous because it allows linking agents to apply strategies that are largely educational to situations that are fundamentally political. Ideally, the linking agent should work with teachers and administrators to ensure that those who are selected actually want to participate in a training experience.

However, a school administrator will often select teachers for training. This method of involvement in a change process raises fundamental questions of values and interests on the part of the participant. If teachers are to be involved in change, it should be not only because they see a need to improve, but also because there is some personal reward for changing. Research shows that if no positive effects result from change, teachers will revert to their old patterns of behavior (see Jung, 1973; Mann, 1978). Nonetheless, decisions that determine who is to be involved in a change process are frequently based on factors other than participant desire or relevance of a teacher's position within the school system. Because linking agents do not always have control over who is involved in a change process, it is important for the linking agent not only to know who is involved and why, but also to share this information with the trainer. A trainer who begins a training session with a group of teachers who are hostile because they have misgivings about why they are there will probably not achieve success.

Assumption 2: Teachers who are involved in training have prior knowledge of the program and know what to expect from the training experience.

Teachers' knowledge of a program will actually vary widely, depending on the extent of their previous experience with the program: some teachers may have participated in the decision-making activities; others may have attended an awareness session on the program; and still others may be hearing about the program for the first time in the training session. Regardless of their prior level of involvement, it is necessary that the trainees understand the basic goals and structure of the program, as well as the nature and value of training, before committing themselves to participation in the change effort (see Jung, 1973; Arnold and Goodloe, 1975; Rosenau and McIntyre, 1977; Hall, 1978). Otherwise, the linking agent and program developer run the risk that the participants will view the training session as another attempt to fill inservice time, rather than as a systematic attempt to change an existing, ineffective school program.

To ensure that the teachers have a basic knowledge of the program being adopted, the linking agent should meet with potential trainees prior to the training session to assess their level of knowledge about and commitment to the program and to fill in any information gaps that may exist. If possible, teachers should be allowed a first-hand view of the program by an on-site visit to the developer site or another adopter site. A working knowledge of what the program will look like when it is in full use is key to a successful training experience.

Assumption 3: Once teachers receive training and are provided with sufficient information and techniques, appropriate behavioral change will follow.

In several of my classrooms, the training session did lead to successful adoption and implementation of the program. However, in other instances the training may have been less than successful because it failed to focus adequately on the concerns of the adopters.

Hall (1978) suggests that change in educational process cannot take place at the institutional level; rather, it must occur at the individual classroom level. Hence, the ability to change a school program rests with the classroom teacher. Unless the information and techniques presented during training meet the individual needs of the trainees, the linking agent and developer cannot expect their behavior to change. This theory is supported by a substantial body of research (see, for example: Fox, 1967; Berman and McLaughlin, 1975; Fullan and Pomfret, 1978).

Hall has identified different "stages of concern about the innovation" beginning with personal or individual concerns and ending with concerns about student performance. Trainers need to be aware of the various types of concerns the teachers will likely have once they reenter the classroom so that these can be addressed during the training session. For example, if the trainer is not sensitive to the management concerns of the teachers, the teachers will probably have difficulty trying to implement the program in their classrooms. Hall has devised techniques for linking agents to use in assessing teachers' needs and concerns, which are too lengthy to elaborate on here. As a starting point for assessing this type of information, the linking agent might consider the following list of questions (Arends, et al, 1978):

1. Who is the person?
2. What does the person want?
3. What does the person believe?
4. What does the person know?
5. What does the person know how to do?
6. What is the person doing now?

The linking agent has easiest access to information regarding the trainees and, as such, should take responsibility for sharing it with the trainer. In this manner, the trainer would be able to take into account the trainees' knowledge, intentions, competencies, beliefs, and actions prior to developing the training session. Given this knowledge, the trainer would be in a better position to influence teacher behavior and to effect a greater commitment to change.

Assumption 4: Educators share a common set of values based on what is best for students that provides the motivation to undergo an improvement process.

We probably all wish this last assumption were true. And, in fact, there are many teachers whose primary motivation is concern over student performance. However, it is important to recognize that most teachers have a number of equally important personal and professional roles that compete for their time and attention.

Keeping this in mind, linking agents should constantly assess the nature of the teachers' concerns relative to other requirements on their time and provide emotional support and technical information when needed. This type of assessment will allow the linking agent to schedule training events at the most opportune time, i.e., when teachers are most open to receiving the information.

SUMMARY

I have discussed various assumptions that linking agents should avoid when working with developer/demonstrators and program adopters during the training and post-training phase of the change process. Undoubtedly, anyone with experience in the linking role has already discounted many, if not all, of these assumptions. But, for those who are new to the field, the information should prove useful.

One final assumption I have since reconsidered follows:

> "Developers and program adopters understand the role of the linking agent and how to use the linking agent to their best advantage to facilitate a successful program adoption."

In fact, the role of the linking agent is relatively new to both developers and adopters. There are not clearly defined guidelines delineating "what a linking agent can do for you." Consequently, there is confusion over what needs to be done and who is responsible for seeing that it gets done.

In reality, the educational improvement process involves two sets of "linkers" or "change agents" (developer/demonstrators and linking agents) working with schools. These change agents share overlapping functions related to awareness activities, needs assessment, problem definition, and ongoing support following training.

This overlapping is necessary because neither developers nor adopters are capable of effectively carrying out the functions without assistance. The linking agent has the time and skills to tap into the adopter's unique needs. In addition, the linking agent can collaborate with developers to maximize their ability in order to tailor the programs to the adopter's needs. As developers and adopters gain experience with a linking agent, the services provided by the linking agent become clearer, and a formidable gap in the process of implementing change is filled.

REFERENCES

Arends, R.; Hersh, R.; and Turner, J. "Inservice Education and the Six O'Clock News." Theory Into Practice, Vol. XVII, No. 3. June, 1978.

Arnold, Daniel S. and Goodloe, Audrey. How To Innovate Successfully. Washington, D.C.: NEA Publications. 1975.

Berman, Paul and McLaughlin, M. W. Federal Programs Supporting Educational Change. (Vol. IV: The Findings in Review.) Santa Monica, California: Rand Corporation. 1975.

Berman, Paul and McLaughlin, M. W. Federal Programs Supporting Educational Change. (Vol. III: Implementing and Sustaining Innovations.) Santa Monica, California: Rand Corporation, 1978.

Bert, Diane K. Problems and Issues in Early Childhood Programs: Staff Training and Program Installation. Paper presented at annual meeting of AERA, Toronto, Canada. March 27-31, 1978.

Bolam, R. "The Types of Environment Most Likely to Favor the Active and Effective Participation of Teachers in Educational Innovation." New Patterns of Teacher Education and Tasks: Teachers as Innovators. Paris, France, 1976.

Duke, Daniel L. The Impact of Trying to Make an Impact or the Negative Side of Noble Ambitions. Stanford, California: Stanford Center for Research and Development in Teaching, April, 1977.

Fox, Robert, et al. Inservice Teacher Education to Support Utilization of New Social Science Curricula. Boulder, Colorado: Social Science Education Consortium, Inc., November, 1967.

Fullan, Michael and Pomfret, Alan. "Research on Curriculum and Instruction Implementation." Review of Educational Research, Winter, 1977.

Hall, Gene, et al. A Developmental Conceptualization of the Adoption Process Within Educational Institutions. University of Texas, Austin. Research and Development Center for Teacher Education, September, 1973.

Hall, Gene and Loucks, Susan F. Teacher Concerns as a Basis for Facilitating and Personalizing Staff Development. Procedures for Adopting Educational Innovations Project, University of Texas, Austin: Research and Development Center for Teacher Education, April, 1978.

Jung, Charles C. Generalizations About Training. Portland, Oregon: Northwest Regional Laboratory, 1973.

Mann, Dale. "The Politics of Inservice." Theory Into Practice, Vol. XVII, No. 3. June, 1978.

Piele, Philip K. Review and Analysis of the Role, Activities, and Training of Educational Linking Agents. Eugene, Oregon: ERIC Clearinghouse on Educational Management, 1975.

Rosenau, Fred S. and McIntyre, Diane H. Packaging Your Educational Program. San Francisco, California: Far West Laboratory, 1977.

Rubin, Louis J. (ed.) Improving Inservice Education: Proposals and Procedures for Change. Boston, Massachusetts: Allyn & Bacon, Inc., 1973.

Beyond Decision Making: Helping Schools During Implementation

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The history of educational improvement efforts indicates that change never occurs easily. People are adept at finding ways to avoid, stall, or limit change, even one that they want. The Rand study, the Experimental Schools study, and other implementation studies[1] have typically found that implementation of change does not always occur, so the literature is full of descriptions of what went wrong.

Implementation of validated programs involves putting into practice something that has worked before and, as such, is more or less defined. For this reason, the expectation is that implementation or adoption of such programs will be a simple matter. The assumption seems to be that if a school chooses a good program and if that program meets the school's needs, implementation will be easy and successful. Thus, most effort is made at the "front end" of the adoption process and, once a decision is made, the adopting school is left on its own.

In the Consortium, we had the opportunity to work in-depth with a limited number of schools involved in a curricular improvement effort through the adoption of validated programs. Because the project focused on reading instruction improvements, most participating schools were elementary schools. We worked with the schools for about a year in assessing needs and selecting an appropriate program. Our assistance continued throughout, and in many cases beyond, the first year of implementation.

During that period of time, participating schools weathered teacher strikes, legislative mandates, and district reorganizations, as well as other external forces that affected the school improvement efforts. In addition, there were internal forces of inertia, organizational pressures, and personality clashes that arose from the change effort itself.

In short, we found that adoption is not a simple matter. Nonetheless, most of our schools are successfully implementing the program they chose and the program is solving the problems they identified. For example, achievement scores in reading comprehension have improved dramatically in some schools. In most cases, the program is now an integral part of the adopting school.

This success is due, in part, from the fact that most of the Consortium linking agents had had prior experience in helping teachers and administrators implement educational change. In addition, we achieved a high rate of success because, during the course of the project, we took into account the following:

- Implementing teachers need support to change their behavior
- The school organization may need assistance to be supportive of the innovation
- Information needed for associated decision making must be gathered from different parts of the organization
- Preserving the integrity of the innovative program and making it fit the local situation are equally important
- Adopters need access to various kinds of resources to solve problems and meet program needs

These factors, which are discussed in the remainder of this paper, are important to consider when undergoing a similar change effort.

IMPLEMENTING TEACHERS NEED SUPPORT TO CHANGE THEIR BEHAVIOR

In a curricular improvement effort, the teachers are the actual implementers. When adopting a new curricular program, the teachers are forced to change their behavior, to experiment with new ways of doing things, and to risk failure. Most of the teachers in Consortium schools were relatively experienced. They had developed their own ways of doing things, and although they had achieved a degree of comfort and success with their own teaching styles, by agreeing to try something new they were courageously admitting that they needed help.

People trying to change their patterns of behavior need a great deal of support to persevere and not return to comfortable familiar routines. As frustration mounts, inertia sets in. There are more forces working to preserve the status quo than to support the change.

To anticipate and address these status quo forces, the linking agent can use the Hall-Loucks Concerns Based Adoption Model[2], which predicts that teachers experience different kinds of concerns at different stages of adoption. When teachers first begin to use an innovation they are overwhelmed by management or "how-to-do-it" concerns. Only after these concerns are met, do they become interested in the program's impact on students or its integration with other programs in the school.

In Consortium schools, teachers spent the first few months of implementation working out the details of the program selected for adoption. There were new materials to develop; tests to run off, administer, and correct, and learning centers to set up and manage. Many teachers complained that their lives were revolving around the new program. "There isn't enough time" was a common complaint.

Consortium linking agents tried to anticipate the need to assist the teachers by setting aside blocks of time for frequent and specific help. In most schools, follow-up training and consultation visits by program representatives were scheduled to occur early in the year and periodically thereafter. Linking agents made regular and frequent visits to classes to see how things were going, provide moral support, and identify specific problems. Where possible, the linking agent would arrange telephone calls to the program developers to get immediate answers to specific questions. Also, in some schools, planning days were scheduled to give teachers time to prepare materials.

In addition to providing scheduled time for this type of assistance, the assistance must be relevant to the type of concerns facing the teachers at that point in time. For example, in one school the linking agent arranged for a reading consultant to present a workshop that would "go beyond" the innovation and cover topics related to but not directly a part of it. The workshop was presented three months after teachers began implementation and was perceived as "too general" and "not helpful." The workshop itself was a good one. The problem was that it was not well timed in terms of addressing teachers' management concerns about what to do next.

THE SCHOOL ORGANIZATION MAY NEED ASSISTANCE TO BE SUPPORTIVE OF THE INNOVATION

A curricular change of any size or significance will place demands for change on the school organization in two ways: (1) implementing teachers need to feel that their work is valued in the school district; and (2) standard operating procedures need to change to accommodate the innovation.

In terms of the need for support for teachers, the most important kind of support comes from the school hierarchy and the climate surrounding the innovation. Recognition and encouragement are important for teachers embarking on a new venture and are more important coming from the teachers' superiors. Teachers need to feel that the effort they are putting into the new program is appreciated by others in the district. Even if they believe the work is helping them and their students, it is important that they know that others recognize and respect this extra effort.

Teachers can tell if the program adoption is important to the principal, for example, by the principal's public statements and by the way the innovation is handled or affects various routine matters. If the new program is important, the principal will look for its use when he or she observes classes during performance reviews. In addition, the principal will find ways to provide necessary supplies or assistance.

Because of their role in the Consortium project, linking agents often knew when teachers were in need of encouragement. In many cases, the linking agent was able to take steps to ensure that the necessary encouragement was provided. For example, sometimes linking agents suggested a visit from district office personnel so that teachers would be reassured that the district knew what the program was about and considered it to be important. In other instances, principals needed only to hear that teachers were in need of a little boost to provide casual praise in the halls or to arrange a celebration at a faculty meeting. These kinds of activities are easy to do but even easier to overlook.

The second kind of assistance the school needs is in incorporating the innovation into its on-going procedures. Because the Consortium project involved change in reading, it had a major impact on the operating routine of elementary schools. Any innovation that will be used by many staff or that makes demands on the resources of the organization will have a significant impact on the school's other activities. The major effects of the innovation are on the school's priorities in terms of its resource allocations, on role definitions and responsibilities, and on organizational goals.

The most important resource affected was time. Conflicting demands on the schedule highlighted most of the reexamination of priorities. Some of the reading programs adopted required more time than had previously been allotted for language arts. Some of the programs required that certain time blocks be scheduled at the same time to enable cross-grouping. All of these changes placed demands on most staff members, even those who would seem to be the least involved in program adoption and implementation. As a result, physical education, art, and music teachers often developed strong feelings about a new reading program that was wreaking havoc with their schedules.

Other changes occurred in roles and patterns of communication (both among teachers and between classroom teachers and others, e.g., reading specialists, principals, special service teachers). In some schools, new jobs were created by the innovation, giving some staff new roles and creating new positions in the organizational structure. In other schools, the reading supervisor became more influential with the principal or provided more consultation to teachers. Some programs required that teachers change significantly their current teaching methods, which in turn, affected the way in which special services teachers supplemented the classroom. In addition, experiencing common problems caused teachers to seek out each other for help. In one school, teachers worked together developing instructional materials, and, at the same time, they discussed and solved each other's problems. The role changes resulted in massive changes in patterns of communication -- people were required to coordinate work with people they had not worked with before.

The linking agent's role in assisting the organization to accommodate the effects of the change on its operating procedures was to try to anticipate some of these changes, plan for them, and resolve differences that arose because of them. For example, in some schools, supervisors, Title I directors, special services coordinators, and the linking agent met during the implementation planning period to reach agreements on how various programs would interact. It was important that the linking agent keep informed of these agreements and help modify them from time to time as required.

INFORMATION NEEDED FOR ASSOCIATED DECISION MAKING MUST BE GATHERED FROM DIFFERENT PARTS OF THE ORGANIZATION

To make effective decisions about the innovation, either for immediate problem-solving or for future planning purposes, it is important to know the status of the implementation effort. However, one's perceptions about the success or failure of the change effort, or about what problems exist, depend on one's position in the organization and one's involvement with the innovation. This was highlighted in one school district where the Assistant Superintendent was enthusiastically planning the expansion of the program to new schools at the same time that the implementing teachers were becoming discouraged with the program and threatening to drop it. Therefore, to ensure that decision making is based on valid and comprehensive information regarding the program, information must be gathered from throughout the organization.

In the Consortium project, the linking agents did not depend on one contact person to accurately describe how the implementation was going. They made sure that they talked to people in different positions in the school in order to plan an intervention that responded to different perspectives and created some cohesion. In the example cited above, for example, the linking agent worked with teachers to help them see the value of their successes with the innovation (which were considerable) and to identify their problems more specifically so that appropriate solutions could be developed. At the same time, the linking agent worked with the Assistant Superintendent to ensure that the expansion process was slowed down and that the implementing teachers' needs were met.

Another good source of information for decision making purposes was the multi-constituent groups of teachers, building and district administrators, and parents that had been established in the first year of the Consortium project to identify local needs and to select a program to solve those needs. In many schools, that group continued to meet to monitor program implementation. The group was an excellent vehicle for sharing different perspectives on the implementation and for working collaboratively to solve problems and develop plans. Having a forum for people in different positions to share their experiences helped to identify problems and solve them before they became overwhelming. Some problems, like needing more supplies, were easy to solve. Others were more complicated or sensitive to deal with, such as identifying teachers needing help with the program. The forum enabled people to identify common needs, develop comprehensive solutions, and undertake common projects, such as increasing parent involvement, evaluating the program, and disseminating their learnings.

PRESERVING THE INTEGRITY OF THE INNOVATIVE PROGRAM AND MAKING IT FIT THE LOCAL SITUATION ARE EQUALLY IMPORTANT

The tension between maintaining the integrity of the validated innovative program and meeting the unique needs of the adopting schools can actually be a positive force for excellence. Consortium linking agents, as objective outsiders who had, at the same time, developed a close working relationship with the participating schools, were able to serve as advocates for both the innovation and for the adopting school district.

Funded to help schools benefit from research and development outcomes, linking agents felt a responsibility to preserve the integrity of the innovation. The innovations were being used in the field because they had already proven successful and workable, and the schools had made careful selections when choosing one innovation from among many. Consequently, the linking agents encouraged the implementers to give the innovation a fair trial before adapting it so that inappropriate adaptations that could alter the usefulness of the program were avoided. In addition, the linking agents had to be wary of people's natural tendency, in an effort to avoid change, to modify the innovation such that it amounted to what they were doing before. The linking agents advocated replicating the program as closely as possible and considering all modifications carefully.

At the same time, the linking agents knew from the Rand research and other experience that adaptation to the local situation is important and necessary to achieve successful implementation. Because the linking agents had developed a close working relationship with the participating schools, they were able to appreciate and look out for local needs. In a way, the linking agents themselves were local, as they were located in the same states as their client schools and understood local laws, life-styles, and issues.

In conversations with program developers, the linking agents probed to identify which program elements were essential and which were expendable or flexible. To facilitate the best answers to the adopters' questions, the linking agents described the organizational context of adopters' questions to the developers. As a participant of neither the adopting school nor the developer staff, and an advocate of both, the linking agent could serve as a negotiator of the best interests of both groups.

ADOPTERS NEED ACCESS TO VARIOUS KINDS OF RESOURCES TO SOLVE PROBLEMS AND MEET PROGRAM NEEDS

The resources needed by implementing schools vary according to the school, the staff involved, and the innovation. It was important for Consortium linking agents to have access to many different kinds of resources and to be able to mobilize them at appropriate times. These resources included: (1) money; (2) expert consultants; (3) consultants from other schools; and (4) access to technology.

The most important resource the linking agents had access to was a small pool of implementation money that could be used according to the needs of the school. Each school was provided with approximately $5,000, an effective amount because it was too small to pay for all adoption costs but large enough to pay for things the district had trouble funding. In other words, although it was clear that the school district would have to bear the brunt of financial support for the adoption, the implementation fund gave the adopting school and the linking agent flexibility and leverage to accomplish things that would have been beyond the reach of the school district. For example, many districts have trouble paying for consultants; some districts have excess funds in one budget line but not in another (e.g., money for teacher stipends but not for materials); some districts refused to release teachers or conduct an evaluation of programs without outside incentives to do so. The implementation fund often served to "unlock" district funds and, in almost every case, amounted to less than half of the total amount spent on the adoption. The fact that the fund was flexible, not tied to the district's bureaucracy, was at least as important as the money itself. In addition to this nominal funding, by being housed in educational service agencies and active in various dissemination networks, the linking agents knew of other funding sources and were able to use these resources to help schools at various points during the process.

In addition to financial resources, through their professional connections and those of their agencies, the linking agents were able to draw on a number of outside people with expertise in a wide range of fields. For example, experts in reading from nearby universities, research and development laboratories, and their own agencies were used to conduct supplementary workshops for implementing teachers, as well as to consult on reading issues with linking agents themselves. Experts in program evaluation, leadership skills, and other topics related to the schools' work were also used. In some instances, National Diffusion Network (NDN) state facilitators[3] linked schools with programs in other subject areas, such as math or writing skills. Moreover, linking agents knew the staff members of many of the programs being adopted and could find out about other experts through talking with each other. This knowledge and interaction helped to find appropriate trainers and follow-up consultants for particular situations.

Other schools also provided valuable external resources. During the program selection stage, for instance, Consortium schools visited nearby schools who were using programs under consideration. Adopting teachers and administrators from these schools provided a perspective on the program that was different from the program developer's and valuable in its own right. Once Consortium schools became adopters, they found it helpful to share their experiences with other adopters and receive and give advice, either through the Consortium or through another process. For example, two Massachusetts schools were adopting the same program. Administrators from the two schools shared materials orders with each other, and a teacher from one school spent a day consulting with teachers at her grade level from the other school. This interaction also took place between states, as sometimes linking agents transmitted ideas from a school in one state to a school in another state. Finally, Consortium schools within a state were brought together through statewide conferences and instate newsletters to share common experiences about the change process itself. Schools were surprised and pleased to find they could learn from each other even when they were involved with different programs.

Finally, the linking agents were able to use the equipment and other technical resources of their host agencies to help the adopting schools. WATS lines and telephone credit cards helped get questions answered by developers located in distant states. Photocopy equipment quickly and easily made readable copies of useful documents (as opposed to the standard "purple beauties" from school mimeograph machines). In some agencies, ERIC files and information specialists provided information searches on related topics, such as introducing reading instruction in kindergarten.

SUMMARY

It is obvious that any curricular change effort must be carefully managed and monitored. Yet, too often, such change occurs without the proper management attention because a busy administrator adds a new project to an already overcrowded schedule. What often occurs is that such task overload results in details being overlooked and slipping deadlines. There is a tendency for the school to move onto new issues -- the administrator believing that the teachers have things under control, and the teachers deciding that this particular change can now be forgotten.

In the Consortium, the linking agents took an active role in managing the change effort. They worked closely with designated administrators, usually building principals, to ensure local ownership of the improvement effort. In many schools, a multi-constituent group shared responsibility for monitoring the implementation and solving associated problems. But the linking agent was the prime manager of change.

Several factors allowed for the effectiveness of this organizational structure.

First, the linking agent had already worked with the school for a year prior to implementation and had gained the trust of school personnel. That trust involved a degree of comfort with one another, but, more importantly, an acceptance that the linking agent knew about change and a willingness to go along with the linking agent's suggestions. Local people understood that the linking agent was 100 percent committed to the project and, therefore, expected the linking agent to know more about its status and to be in the best position to keep on top of things.

Second, by being an active manager, the linking agent was able to ensure that teachers got the support they needed and that little problems were taken care of before they became big. More importantly, by working closely with local personnel, the linking agent was able to provide a model for managing future change efforts, by doing, explaining the importance of the various steps he or she was carrying out.

Third, the linking agent's position as an outsider enabled several benefits to occur. The regular presence of an outsider gave an importance, a weight, to the work that would have been difficult to sustain otherwise. The linking agent's presence on site was perceived as both a support and an incentive to implementers. A new person moving in and out of the school seems to bring a refreshment to the daily work that is appreciated by staff. In addition, as an outsider, and one knowledgeable about change processes, the linking agent brought a valuable perspective to site personnel. Many times, site personnel encountered normal problems with role articulation, communication patterns, or inter-unit conflicts. The linking agent was able to articulate and legitimize the problems and encourage local staff to work on solutions. The linking agent's perspective also often helped site personnel to see and appreciate each other in new ways.

Change sharpens differences and heightens self-interest concerns. In order to resolve the disruptions that change brings, differences must be resolved in ways that are mutually acceptable. An outside consultant who has gained the trust of many, whose self-interest is the common interest of the project, and who is able to recognize and appreciate many sides to an argument can be valuable in bringing the various groups together to achieve successful implementation and ultimate school improvement.

References

1. Among the many studies of educational change and implementation are the following:

Berman, Paul, McLaughlin, M., and others. Federal Programs Supporting Educational Change. Vol. I-V. Santa Monica, CA: Rand Corporation, 1975.

Gross, N.C;, Giacquinta, J.B.; and Bernstein, M. Implementing Organizational Innovations: A Sociological Analysis of Planned Educational Change. New York: Basic Books, Inc., 1971.

Herriott, Robert and Gross, Neal. The Dynamics of Planned Educational Change: Case Studies and Analysis from the Evaluation and Documentation of Experimental Schools Program for Small Schools Serving Rural Areas. Cambridge, MA: Abt Associates, 1977.

Miles, M.B., Ed. Innovation in Education. New York: Teachers' College Press, 1967.

In addition, an excellent review of implementation studies is available in:

Fullan, M. and Pomfret, A. Review of Research on Curriculum Implementation. Toronto: Ontario Institute for Studies in Education (Prepared for National Institute for Education NIE-P-74-0122), April, 1975.

2. For a concise description of the Concerns Based Adoption Model, see:

   Loucks, Susan F. and Hall, Gene E. "Assessing and Facilitating the Implementation of Innovations: A New Approach", Educational Technology, February, 1977.

3. The National Diffusion Network (NDN) is a nationwide system to help school districts and other educational institutions to become aware of and use exemplary programs. Programs deemed exemplary by a national panel are funded as Developer/Demonstrators. In each state, State Facilitators are funded as the primary link between that state's schools and the exemplary programs. Consortium linking agents were all located in agencies with strong NDN connections.

Disengagement

by Nancy Dannenberg and Margaret Robinson
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Nancy Dannenberg has worked extensively in the field of child care, training teachers and upgrading the quality of programs. With a background in psychology and community organization, she has worked as a research assistant in a pilot anti-poverty program in New York City, as director of a child care center in Oakland, and as a child care specialist with community groups for the City of Berkeley.

Margaret Robinson's educational background is in Early Childhood and Family Life studies. She has served in several capacities at the Far West Laboratory including researcher, trainer, and program manager. Ms. Robinson has designed, developed, and conducted several training programs as well as created and field tested learning materials for Head Start and other early childhood programs.

The California Consortium worked with three school districts within a 100 mile radius of the San Francisco Bay Area. Districts participating in the Consortium were selected on the basis of their commitment to all phases of the project. Students involved in the project were all reading 20 to 50 percent below grade level, were from low socio-economic to high socio-economic communities, and represented Black, Hispanic, and White ethnic groups.

A plan of involvement was developed by the linking agent for each district and used as a basis for planning and conducting site visitations. The length of time spent in the problem identification phase that led to product selection varied by site although the goals and objectives remained the same for each school. The goals and objectives were:

1. To identify problems in the teaching of reading

    - by conducting needs assessments of teacher opinion as to the nature of the reading problem and consulting the results of standardized tests,
    - by analyzing student and teacher needs in the area of reading,
    - by assessing the level of parent involvement in the target students' education, and
    - by identifying the elements beyond the curriculum unique to the school district that affect reading.

2. To establish a climate for change
    - by establishing a representative, multi-constituent Decision Making Group (DMG)
    - by facilitating communication among the DMG members and between the DMG and the district at large.
    - by analyzing the existing decision-making process, and
    - by analyzing prior change and attempts at change in the district.
3. To establish criteria for product selection
    - by determining the extent and feasibility of staff and physical reorganization,
    - by determining financial support of Consortium effort,
    - by translating problem statements into selection criteria (action components),and
    - by screening available products according to selection criteria.
4. To anticipate constraining forces during implementation
    - by developing criteria for a program implementation,
    - by outlining an initial implementation period, and
    - by identifying possible obstacles for success aimed at problem prevention.
5. To institutionalize the problem-solving decision-making process at the site level.

The first four of these goals -- those related to implementation of an innovative program to solve a reading problem -- were mutually agreed to by the linking agent and the school and provided entrance into the schools. The goal of institutionalizing a process of change (Goal 5) emerged as we completed the problem-solving decision-making phase of the project. It was at that time we began to observe that: "The reason that many successfully adopted innovations seem to fade and disappear in time is that the systems which adopted those innovations failed to fully incorporate innovative norms and attitudes which are fundamental to innovative behavior" (Havelock, 1970).

Some schools were initially interested only in the innovation of one particular program and were not interested in establishing an ongoing problem-solving process or developing an internal climate that supports change in an ongoing way. In working towards the fifth goal, we tried to get schools to see that a particular innovation may, in time, become inappropriate or some other new ideas may emerge that more fully meet the needs of the school. One must continue to change in order to remain relevant. As Watson and Glaser (1965) point out, ". . . if an organization is geared to continued growth, its members will value forward moving change as a recurrent and desirable phenomenon."

After the program is installed and staff appears to be comfortable with the way it is operating, we found it was time for the linking agent to start planning for disengagement. Webster defines disengagement in the following way ". . . to release from involvement, to free from an obligation, cancellation of an engagement, to extricate from entanglement . . ."

The correct moment to detach oneself from the school, however, is not an absolute one, and should be gradual. How do you know when a school can stand on its own? Gene Hall's "Six Levels of Use of the Innovation" suggests when the school is at Level VI, the Self Renewal Stage, (state in which the user reevaluates the quality of use of the innovation, seeks major modifications of or alternatives to present innovation to achieve increased impact on clients, examines new developments in the field, and explores new goals for self and the system), it is clearly time to disengage. However, time is also a critical factor, since it might have taken one site more time than another site to accomplish the initial tasks and it might not be economically feasible for a linker to wait for a site to reach the stage of self-renewal.

If the disengagement process is started when the school is at Level III (the Mechanical Stage, the state in which the user focuses most effort on the short-term, day-to-day use of the innovation with little time for reflection; changes in use are made more to meet user needs than client needs; and the user is primarily engaged in a stepwise attempt to master the tasks required to use the innovation, often resulting in disjointed and superficial use), different strategies will be required for the disengagement phase. The linking agent must be aware of what the ideal outcome would be as well as the schools' current level of use in the innovation. Effective strategies for disengagement have been identified as consultation, promotion of dialogue and communication, and in some cases, structured training. By assessing what each school's level of use of the innovation is, the linking agent can provide and/or identify the necessary resources to support the move to the next level.

The questions that should be posited are: What should be provided? How can the school be helped to provide those needed resources for themselves? Where the schools are near self-renewal capacity, emphasis should be placed upon their knowledge of outside resources, consultants, and most importantly, a program developer. Schools need to develop a strategy to organize support for the program within the district and the community. On the other hand, where a school is at the Mechanical Use Stage of the innovation, strategies should be developed, with the head teacher or principal, to promote awareness and develop skills of program staff as well as effective ways to engage parents and school personnel at large. Evaluation of program materials and objective feedback of the program from an outside observer are important here.

What happens in the disengagement phase relates directly to what happened in the earlier phases of the innovation and can be likened to Erickson's stages in development, in that they are sequential. The needs assessment phase was most critical and resulted in some schools dropping out of the program because the Decision Making Group was unable to accept the results of the needs assessment. If this first phase of the implementation process is short circuited, the group will not have prepared themselves to go through the selection criteria. And if the program selected does not meet the needs of the school, problems associated with the selection process will again surface during the disengagement phase.
Training is another critical phase that has impact on the disengagement. If the training was inadequate, the success of the innovation is threatened and the time required to reach the self-renewal stage in the innovation is prolonged. Disengagment may have to occur before a site is ready to disengage. How successful the review, evaluation, and monitoring system has been is important because the learning and awareness developed in these stages are necessary to form

the bulwark of a self-renewal mechanism that will persist after the linking agent leaves.

The multi-constituent Decision Making Group (DMG) was set up in the early stages of adoption in each school. The linking agent worked closely with the DMG and established a structure for looking at internal problems and determining solutions. During the trial implementation stage the focus of the DMG was changed from decision-making to program evaluation. Without an institutionalized Decision Making Group there is no process established to assure the ongoing maintenance of the program or, what may be more important, the sharing of feedback and ideas. As we enter into the disengagement phase of this project it is time to assess the efficacy of the Decision Making Group and to determine how to refocus their energies.

The DMG should be utilized to look at the program and its learnings and have the responsibility of providing support to the program by continually expanding ideas, materials, and resources that supplement and enrich the program. They will need to look at the internal climate in the school and assess how it will foster continuance of the program. They need to look at the materials of the program, and see if they are easily available and if they are meeting the needs of the school. They need to assess the needs of the teachers and to plan inservice training as well as shared learning experiences and workshops to meet those needs.

This Decision Making Group is well suited to perform maintenance functions of the program because they have experienced the problem identification process during the initiation of the program before and share a feeling of security and cohesiveness as a group as well as have a sense of continuity.

The question of when you start to prepare this group to assume this responsibility for maintenance functions has to be determined by the linking agent and the staff and will vary in different sites. It should be after the program is firmly and solidly installed and functioning smoothly, and anywhere from six months to a year before the disengagement.

How do you prepare the Decision Making Group to perform the program maintenance function? Ongoing evaluation and data collection will help the group to focus on how their role has changed and what their role should be for continuance of the program. Reviewing with the group what changes occurred during the past years' efforts, what worked well and why, and exploring obstacles and aspects of the program that did not work well, will provide the basis for making future decisions. Out of this discussion and exploration, plans for the next year can be developed and a sense of continuity can be established. Reviewing, also, the steps taken to install the program, by asking the questions -- what was good about the process, and would you go through it again -- serves a dual purpose of helping the group gain a sense of confidence from seeing what they have accomplished as well as gaining new skills.

Most of the schools in which we have implemented an innovation still seem to contain with them managerial assumptions and practices which are contrary to the spirit of innovation. If the major preoccupation of the members of an organization is with hierarchical concerns and maintaining their own privileges, the innovation of a "special" program will be essentially an isolated phenomenon and one which has no genuine quality of ongoing change. In short, what is required is a different outlook on life, on oneself, and on others, and this requires processes of personal and interpersonal reeducation. The DMG can be the place where these processes begin to be practiced as staff share in decisions and participate in the running of the school.

A by-product, therefore, of this Decision Making Group is the provision of a support mechanism that will enable change to persist after the linking agent has left. This will be evident if the following has occurred:

1. Teachers are actively involved in creating change.

2. A feeling of ownership has been established and teachers are, therefore, ready to risk more.

3. Teachers have the opportunity to receive positive feedback from their peers enabling them to support others and set up a cycle of change and mutual support.

4. Teachers share ideas with other staff members and generate more innovative ideas.

5. Teachers feel they have greater influence over what they are doing.

It is important that district level people be aware and be supportive of the innovation and that the linking agent nurture the administration, the curriculum department, and the central staff by reporting regularly to them, keeping them informed, and involving them in the implementation change process.

The role of the principal is critical, for teachers will have a difficult time making a commitment to what they are doing if this person does not support the Decision Making Group. The principal must support teachers in taking time to work with the group and must educate and negotiate with supervisors and the Board of Education for continued support. The principal either has to convene meetings and coordinate activities of the Decision Making Group or else delegate this responsibility to a prime mover on staff.

It is vital that as the disengagement process begins someone within the school is clearly identified as the "prime mover," or the coordinator of the program. This person could be the principal or a head teacher. He or she should be viewed ideally as a neutral person who is respected but who is essentially nonthreatening to the rest of the staff. The linking agent could assist this person to take over the coordinating role in the DMG relatively early in the process by identifying and outlining some of the management tasks necessary to keep the program in operation, such as:

- How will training be designed to respond to individual needs of the teachers, and who will conduct it?
- What financial resources are available for specific program needs and how can they be identified?
- What intermediate agencies are available for resources and what are the resources available?
- What other R&D programs have been identified and is there an awareness of and access to such programs as the State Facilitator Program and/or Title IV-C?

The adoption itself could function as a mini-demonstrator site and/or be in touch with another adopter site to exchange ideas and share resources. Another possibility is to network with program consultants and other adopters.

Given the insecurity of the current economic picture of funding, it is completely understandable that despite apparent success of a particular innovative program in a particular school there also exists a degree of apprehension on the part of the linking agent and school staff about the ability of the program to continue. One possibility for dealing with the loss of a school that houses the innovation is to diversify and expand within the district and thus strengthen program support and the possibility of continuance. If, however, the innovation remains one isolated phenomenon, several other results accrue. The teachers feel isolated, unsupported, and unacknowledged and morale suffers. It becomes very easy for the program to be lost by subsequent boards and principals who know little about the program and are not committed to its continuance. Some of the advantages of diversification that we have found are:

1. Schools can serve as support to each other.
2. Schools can support each other by sharing ideas, resources and expertise, thus creating more energy for each teacher.
3. Teachers feel more important, more worthy, and thus are more interested, involved and committed to a program that is seen as important.
4. Parents and students become aware of the program and seek to become involved.
5. Visitors observe and discuss the program; press coverages further disseminate the successes of the program.

High visibility of the program's success can also enhance its chances of continuance. It can help establish strong parental and district support if the parents and the district are able to share in the achievement of the students.

One way to promote high visibility is to disseminate program brochures. The brochures serve to inform visitors, parents, and substitute teachers of the purpose of the program, as well as the role of various people working in the program, and functions as a training tool for volunteers. It is a way of building spirit, pulling together the program, and presenting it in an attractive way that says to parents and to the community "Hey, we did this and it works!" Sometimes, it has not been obvious up to that point. More than anything, however, it substantiates the innovative program and establishes a sense of continuity.

The high visibility of the program makes it harder to fade from sight and keeps the community and parents, in particular, involved, and functioning as a valuable resource to a program's continuance.

The question of how one disengages or withdraws from a school site, after having provided the catalyst for implementing an innovation, requires consideration of many factors, some of which have been discussed. One thing is certain: it cannot occur instantaneously, as it is an extension of the implementation process. Mechanisms for disengagement must be initiated during the early stages of adoption of the innovation. A critical analysis by the Decision Making Group and by the linking agent of the history of implementing the innovation, and the changes that have occurred in both the internal and external environment of the school and community, would seem to be a logical step to take in planning for disengagement and continuance of the innovation.

BIBLIOGRAPHY

Benne, Kenneth D.; Bennis, Warren G.; and Chin, Robert. *The Planning of Change*. New York: Holt, Rinehart and Winston, Inc., 1961.

Chesler, Mark and Fox, Robert. "Teacher Peer Relations and Educational Change," *NEA Journal*. May 1967, Vol. 56 No. 3, pp. 25 and 26.

Hall, Gene E.; Wallace, Richard C. Jr.; and Dossett, William F. *A Developmental Conceptualization of the Adoption Process Within Educational Institutions*. Austin: Texas University Center for Teacher Education, 1973.

Hall, Gene E. and Loucks, Susan F. *A Developmental Model for Determining Whether or not the Treatment Really is Implemented*. Austin: Texas University Center for Teacher Education, 1976.

Havelock, Ronald G. *A Training Model for Change Agents in State Education Agencies*. Center for Research on Utilization of Scientific Knowledge, Ann Arbor: The University of Michigan, 1970.

Manning, Brad A. *The "Trouble Shooting" Checklist: A Guide for the Educational Change Agent*. Austin: Texas University Center for Teacher Education, 1974.

Morphet, Edgar L. and Ryan, Charles O. (Eds.). *Designing Education for the Future No. 3. Planning and Effecting Needed Changes in Education*. New York: Citation Press, 1967.

Nash, Nicholas and Culbertson, Jack. Linking Processes in Educational Improvement. Columbus, Ohio: University Council for Educational Administration, 1977.

Rogers, Everett M. Diffusion of Innovations. New York: The Free Press, 1962.

Watson, Goodwin (Ed). Concepts for Social Change. Union, New Jersey: Cooperative Project for Educational Development, 1967.

On-The-Job Learning, Training, and Support for Linking Agents in the Consortium Project

Carol Johnson's education and experience are in program and organizational change and staff development, with emphasis in curriculum and instruction. As Coordinator of Paraprofessional Training for the Minneapolis Public Schools, she was responsible for the development and implementation of Title I training opportunities and inservice materials. Ms. Johnson was a teacher and career counselor before joining the staff of The EXCHANGE and becoming the Consortium's Minnesota Linking Agent.

Diane Lassman, Director of The EXCHANGE, coordinated its establishment as the Dissemination Unit of the Minneapolis Public Schools/University of Minnesota Teacher Center. In addition to her involvement in teaching, community affairs, and various dissemination efforts, she worked with the Experimental Schools Program at the state and local levels, and has served as board member on the Teachers' Centers Exchange Project. Ms. Lassman was the Minnesota Agency Supervisor for the Consortium Project.

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INTRODUCTION

This paper is an attempt to crystallize our thoughts about sources of learning and support available to educational linking agents. Our thoughts are derived from our experiences -- as a linking agent and a linking agency director -- in a three-year NIE-funded program (called the Consortium Project) in which linking agents worked with schools to help them identify needs, and select and implement new reading programs.

Our purposes for pulling together our ideas about linker training are twofold. Working together to write about the processes of training and support for linkers that we have experienced has given an opportunity to share with each other what we've learned. Also, we hope that what we have learned will be useful to others interested in strategies for training and supporting persons in linker roles whether their title be linking agent, teacher center advisor, facilitator, resource consultant, or curriculum generalist.

Four sources of learning, support, and influence were important to our Consortium work:

1. the experience of working directly with the staffs of six schools in Minnesota;

2. the staff, resources, and organization supports provided by our host agency, The EXCHANGE at the Minneapolis Public Schools/University of Minnesota Teacher Center;

3. interactions with our fellow linking agents working on the project in other states; and

4. the linker training and support activities initiated by the central staff of the Consortium Project.

Our paper describes how and what we learned about being a linking agent from each of these four sources, analyzes problems encountered, and provides recommendations based on our experience concerning effective linker training and support.

ON THE JOB LEARNING: IN THE SCHOOLS

The linker's exposure to and involvement in what happens when a school undergoes change is an important (and easily overlooked) source of learning. We have found that one of the best ways to learn the job of helping a school change is by helping a school change. Four important aspects of the linking agent's role are made real by the experience of such "on the job" learning.

Working with and relating to people with different roles, views, and responsibilities

Over a three-year period each Consortium linking agent worked with a multiconstituent group and with a variety of individuals in four different schools. In our schools, the multiconstituent groups ranged from those with exclusively school staff representation (teachers and principals) to those that also included students, parents, paraprofessionals, superintendents, and specialists. These groups were charged with problem-solving, decision-making, and planning to select and implement a new reading program. The linker's job was to facilitate and assist each group to achieve its tasks.

In addition to work with the multiconstituent groups, linkers also had many opportunities for contact and interaction with individuals in each district. Linkers needed to be equally comfortable and skilled at chatting informally with teachers or volunteers in the staff lounge and at conducting briefing sessions with key administrators who wished to be kept informed of the project's status.

The linking agent's continuous interactions with a wide array of people holding different jobs, different perspectives and, sometimes, competing or conflicting viewpoints can, we learned, be a strong, positive force for building the linker's interpersonal and communication skills.

Refining and adapting strategies for helping schools accomplish their goals

In the same way that meteorologists can often forecast prevailing weather conditions but not be completely accurate about what the weather will be at a given hour, Consortium linking agents entered schools with a general knowledge of the strategies required to help schools change but unable to predict in advance precisely how or when to use various approaches. There is a difference, we learned, between being able to develop strategies for establishing credibility with teachers, remaining unbiased, facilitating conflict resolution, or maintaining communication to influential staff and knowing when to apply each strategy to achieve optimum results. For example, it may be logical for a linking agent to help school staff focus on long-range planning soon after a new program has been selected, but this same action may result in an explosive session if a teacher strike is at hand or if the district is in the process of laying off teachers.

The evolving character of schools as they are shaped by new programs, scheduling problems, patterns of communication within and without, teacher strikes, federal regulations, and a host of other internal and external forces make them a place where linking agents are constantly learning how to adapt their skills, strategies, and approaches to meet the situation at hand.

Working as an "outsider" inside a school system and undserstanding schools' responses to "outsiders"

Rather than being welcomed with open arms as a source of long-awaited assistance, resources, and access to program alternatives, linkers were sometimes initially viewed with caution, and even a little suspicion, by the school staffs who were to be the linker's clients. After having worked with our six schools throughout the project we have come to understand some of the reasons why the linker may at the outset be a carefully watched "outsider."

- Resentment of outside interference. As a representative of a federally-sponsored, "soft money" program, the linker was sometimes viewed as just the latest in a series of aggravations wrought upon the school by the federal government. Since new federally-sponsored programs often mean more work, more time, more change, and little reward for school staff, such a "federally-funded outsider" is understandable.

- Reaction to top down decision-making. Many federally-sponsored programs that have an impact on teachers' daily lives are mandated by law. The changes they experience are the result of decisions they've had no part in making. Often, too, changes that originate closer to home in the office of the superintendent or the principal result in consequences for teachers and other staff without their having had an opportunity for advice or consent. Not surprisingly then, staffs in Consortium schools sometimes had concerns at the outset that in this project, as in others, their interests, needs, and concerns might not be adequately taken into account. As the most foreign and most visible manifestation of the new program, the linking agent was often the target of such concerns.

- Unfamiliarity with and confusion about the linker's role. It is fair to say that very few schools have had an experience working with a linking agent. The role itself, still new and evolving, is scarcely documented in the literature. This newness and unfamiliarity, even without the concerns described above, almost guaranteed that some school staff would have concerns about the ways in which the linker's role would overlap, duplicate, or otherwise complicate their own roles. In some cases, it was the school principal who felt this concern. In other cases, the reading specialist or the district curriculum consultant was concerned about being "upstaged." In every case, in addition to whatever else was going on, the linking agents had to be conscious of the fact that they themselves represented a major innovation for the school to contend with.

- Complicated patterns of relationship and communication inside the school district. In many ways, the linking agent's ability to "gain entry" into the school and to overcome the fears and concerns described above depends upon the linker's ability to develop relationships and communicate with the right people at the right time. Doing this, in turn, assumes that the linker can discern who key people are, and how best to begin reaching them -- all of which may be complicated by internal "politics" and patterns of interaction not readily discernible by an outsider.

While these issues of being an "outsider" trying to work on the inside may appear to present insurmountable problems, we have learned -- again, largely through our hard-earned experience -- that there are ways to proceed. Most important, perhaps, is the linker's own recognition of the fact that s/he *is* an outsider in a school district and that reactions such as those described above are not uncommon. Important, too, is the linker's ability to recognize and respond to the genuine and legitimate concerns that underlie such responses.

Knowing that teachers will resent a program being foisted upon them, the linker must find ways to meaningfully involve teachers in the selection process. This, in turn, may mean finding ways to help the administration allow such involvement. Being able to initiate changes such as these requires that the linker know or learn a lot about the people and the climate in which s/he is working. This may involve some or all of the following:

- Finding the people who have been involved in new programs in the past. If they have had successful experiences, such people can be vigorous supporters of other new undertakings.
- Uncovering, strengthening, and supporting the existing desire among school staff to improve what they do.
- Identifying the rewards and incentives for change relevant to different people in different roles.
- Finding out who the people are who have tended to shape and control events (formally and informally) prior to the linking agent's involvement.
- Identifying and working within the existing patterns of communication in the school and in the district.

Coping with uncontrollable influences, conditions and events

Another critically important on-the-job learning that we have carried away from our Consortium experience is an understanding of the fact that three years is a long time in the life of a school district and that, in the space of that time, there are innumerable, unpredictable influences, conditions, and events that can alter, change, and sometimes put an end to the work that we do.

At one school in which we worked the district's desegregation plan closed the school and dispersed the staff and students to several other schools throughout the city, just as the staff culminated several months' work with the selection of a new program for school-wide adoption. In another school, staff reassignments resulted in the linking agent beginning the second year of work with none of the previously committed and involved administrative staff remaining at the site. In a third district, the school board's deliberations over whether or not to close a school went on for several months leaving the staff and the linker unable to consider next steps or begin carrying out planned activities for program implementation.

School strikes, teacher layoffs, staff reassignments, budget cuts, failed bond issues, changing district priorities or administration -- any and all of these may be important influences on the work of the linking agent. Plans, timelines, and strategies must be capable of being altered without completely shattering the work that has been done. Linkers must learn to expect the unexpected and to re-camp, re-plan, and carry on accordingly.

TRAINING AND SUPPORT CLOSE TO HOME: THE LINKER'S HOST AGENCY

In each of the six agencies that participated in the Consortium Project a linking agent and agency supervisor were funded as a team. Creating such a team was a conscious decision made with the intent of encouraging the linker's use of resources extant in the host agency and to insure the availability of management support for each linker.

With access to a supportive advisor and the range of resources housed in the agency, Consortium linking agents were able to seek and initiate their own opportunities for training as well as to learn from other school improvement efforts ongoing within the host agency. Our host agency, The EXCHANGE, has been a rich source of support in many forms.

Access to other staff

The linking agent-supervisor pairing was an important source of help and support. Having another staff member, the agency supervisor, closely involved in the project helped insure that an experienced, knowledgeable person beside the linker had a high investment in project operation and outcomes. It also meant that the linking agent had ready access to another's ideas, perspectives, and assistance as strategies were developed and decisions made. In our case, the linking agent and agency supervisor met on alternating weeks to share information, plan next steps, and assess progress.

Access to other staff was also provided the Consortium linking agent through the EXCHANGE Staffing Matrix, a staff sharing design to foster close working relationships among staff from different projects in the agency. Sharing staff simply means that each staff member owns a share of every other staff member's time. The matrix provides a framework in which staff are not only allowed to "step out of role," they are encouraged to do so in support of one another's projects. Sharing staff across the EXCHANGE's diverse array of training programs, curriculum development activities, and brokerage services provided a rich bank of expertise from which the Consortium linking agent was able to draw.

In addition, being able to easily communicate with other linking agents in-house insured that learnings were not limited to single project experiences and increased the ways in which the agency could apply the learnings from one project to others. Regular meetings of EXCHANGE staff offered the Consortium linking agent an effective means of updating and sharing program activities and for learning with and from others involved in school improvement efforts. Like the linker's work in the school, these inter-staff exchanges constitute an important kind of on-the-job training.

Access to program resources

Having access to program resources from other EXCHANGE programs was another important source of linker support. A few examples will best illustrate this point:

- The EXCHANGE's National Diffusion Network State Facilitator staff helped the Consortium linker contact reading program developers and compile information about resources schools might consider.

- University of Minnesota staff helped the linker provide workshops on reading curriculum for the schools involved in the Consortium Project.

- Staff from the Minnesota State Dissemination Capacity Building Project invited the Consortium linker to attend some linker training events that the project was involved in.

- The Director of the Teacher Center/EXCHANGE conducted leadership training workshops for administrators in one Consortium school.

Professional development opportunities

Both the organization's support of staff development and the variety of professional development opportunities indigenous to the agency's university setting (courses, seminars, conferences, etc.) provided the Consortium linking agent with many, many choices for self-initiated, job-related learning close to home.

FELLOW LINKING AGENTS AS A LEARNING RESOURCE

As Consortium linkers we not only had opportunities to learn from others in our host agencies, but also benefited from chances to learn from other Consortium linking agents.

An early linker sharing activity sponsored by the Consortium Project involved the preparation and exchange of Critical Incident Reports and the development of communication teams consisting of two linking agents and a Consortium Central staff person. In a Critical Incident Report, each linking agent shared with others a recent, crucial event or problem and then received assistance and suggestions from other members of the team. Monthly conference calls were scheduled for discussion of the Critical Incident Reports and for updates related to previous reports. Critical Incident exchanges discontinued when linking agents began sharing information and problems with each other on a regular basis without the structure of the report format and conference call.

A similar strategy for helping linkers learn from each other was often used at training events where each linking agent had the opportunity to share an incident, problem, or concern related to a school site and to receive immediate, focused assistance from other linking agents and Consortium staff. During such sessions everyone's attention and all the resources of the group focused on helping the individual linker hear others' perspectives and identify ways to resolve problems. Linkers were encouraged to share successes as well as problems, but in each case the goal was to enable the linker to solicit as much specific assistance from peers as possible. In addition to providing direct support for individual linking agents, this activity sharpened the listening and problem-solving skills of all the linkers involved.

As a result of the trust that developed among linkers, sharing by telephone became a valuable and frequently used resource for dealing with individual problems and questions. One reason for the success of this spontaneous sharing was that respect for the differences in individual linking agent styles and approaches existed among the linkers and between the linkers and the project's central staff.

The backgrounds of the linking agents themselves also contributed to the breadth of learning resources available to each individual. Persons who had previously been involved in NDN State Facilitator projects, organization development, adult education, teacher training, clinical psychology, and educational evaluation exemplify the range of expertise represented in the six Consortium linking agents. Consortium Central's task of designing training and support activities to build upon and utilize these differences helped facilitate the extent to which we came to value and seek out the varied perspectives of our peers.

TRAINING AND SUPPORT CENTRALLY COORDINATED BY THE PROJECT

A special component within the Consortium Project provided resources, training, and support to each of the six project linking agents housed in different agencies around the country. The major training and support strategies used included linker training workshops, ongoing consultation and assistance from the project's linker support specialist, newsletters, and the provision of products and resources related to the linker's job.

Linker training workshops

Consortium Central convened linker training workshops twice during each year. Designed to build skills, address program management issues, and provide assistance for real problems faced by the linking agents in their work with schools, the workshops typically ran 3-4 days and included role playing activities, where actual critical incidents were simulated; client related problem exploration; and plan development sessions where linking agents worked out specific activities to be implemented at the school sites.

Formal and informal assessments were used to determine the content of each workshop. Written surveys, telephone contacts, and data about linker activities in schools provided in weekly reports to Consortium Central staff supplied information about concerns and problems that linking agents faced. The Consortium milestones, benchmarks for the linkers' work with the schools, provided a useful framework for identifying appropriate training topics keyed to linker activities as they helped schools from problem identification through program selection to implementation.

The workshop agenda was prepared by Consortium Central staff in consultation with linking agents and supervisors. During workshops, linkers were encouraged to identify areas where they needed help, as well as areas where their expertise would be helpful to another linker. In many cases, the workshop agenda was adjusted to allow for this kind of exchange.

Early Consortium workshps involved the use of training materials and processes from several sources, including problem-solving strategies from the Research Utilizing Problem Solving (RUPS) Program (Northwest Regional Laboratory), Chalk Talk (Far West Regional Laboratory), external and in-house consultants, as well as the linkers themselves, the agency supervisors, and staff from the host agencies.

Workshop sites were alternated among the six participating linking agencies to provide linkers with an opportunity to understand further the diversity of the resources within each agency and to facilitate linkers' interaction with other people and programs involved in educational change.

The Consortium Linker Support Specialist

As part of its special focus on providing linker training and support, the Consortium Central personnel included a linker support specialist who functioned as the linking agents' "linker" providing help with problems, suggesting and locating needed resources, assisting with planning and maintaining regular contact with each linking agent. We found the availability of the linker support specialist particularly helpful in the early stages of the project for clarifying and balancing the training and support function of the central project office with its responsibilities for management and coordination.

Another function of the linker support specialist, and occasionally of the Consortium Project Director, was the project "circuit ride," during which one or both would visit each of the six linking agencies, go to the project schools, meet with school staff, and work with individual linking agents both to solve problems and to help carry out in-school activities.

Sharing among linking agencies and linking agents in the Consortium was viewed as an important means of learning and providing support to linking agents and the presence of the linker support specialist helped facilitate such exchange. In addition to workshops, ongoing telephone contact, and circuit rides, two Consortium-produced newsletters served to promote sharing among the linkers and among the Consortium schools.

Consortium newsletters

"Linkerland News" was an in-project newsletter for and about the linking agents. Written by the linker support specialist, this newsletter focused on issues and activities identified from telephone contact with and reports by each linker. Articles included linker success stories, suggested intervention strategies, examples of what was tried, examples of similar problems and issues surfacing across schools, and resource ideas. This mechanism for connecting linkers with one another was useful in helping us to anticipate and plan for potential problems.

A second newsletter, "In Process," was distributed to schools and linking agency staff. Each issue provided an update of recent happenings and future Consortium activities at various schools. For school staffs, this newsletter served as a source of both support and acknowledgement for the work and progress they made. Both linking agents and schools found the commonality of experiences across schools reflected in the newsletter reassuring. "In Process" also helped schools understand and feel part of the larger RDU Program.

Resources related to the linker's job

Consortium Central developed and provided each linking agent with a "Linking Agent Tool Kit." The Tool Kit contained books, articles, tools and planning materials keyed to each of the milestones that comprised the goals of the linker's work with schools. The Tool Kit was cross-referenced and organized specifically to help linking agents find and use print resources that matched the requirements of their jobs.

Centrally-coordinated training and support for linking agents: some problems

The initial design for Consortium linker training and support was a blueprint for addressing linking agent needs anticipated during the planning of the project. As with many blueprints, what was designed at the planning table was often and appropriately modified to respond to unanticipated operational realities. The description of specific Consortium linker training activities in the section above alludes to changes that occurred over time. In this section we will discuss some of the problems and occurrences that prompted those changes, and present our recommendations -- given our experiences -- about what makes for effective, centrally coordinated training and support for linkers.

- Changing Needs. Developing and coordinating a centralized program for training and support was confounded by the fact that the linkers' needs changed over time. Initial requests for training help were focused on concrete problems, e.g. how to define the reading program resource pool for adopters, how to explain budget arrangements, etc. Later support needs focused on more global processes: supporting and monitoring implementation in the school, developing evaluation plans and so on. In some ways the shifting focus of linker needs over time represented a developmental progression similar to that developed by Hall (1974) in his studies of teachers' concerns during innovation implementation: linkers' concerns at the beginning of the project revolved around questions of "What will this job mean for me?" "How well will I be able to perform?" and over time moved toward concerns about "How effective is the project in my schools?" "How can I give them the best help and assistance?" This developmental progression in linker needs and concerns necessitated continual modifications in the substance and design of Consortium training activities.

- Diverse needs and competing agendas. Developing training activities that would simultaneously meet group needs, individual needs, and project requirements was often difficult and sometimes a source of friction between (some or all) linkers and central staff. For example, a linking agent might want assistance with plans for helping the school develop an evaluation plan at a time when Consortium Central felt it was important to focus on project-wide documentation and reporting. In another instance the needs of individual linkers at a single workshop ranged from help with site selection to help with monitoring implementation to concerns about case study preparation.

  In these instances, developing priorities for the limited time available at training meetings required discussion and compromise on both sides. Since Consortium Central had a responsibility to provide training, and since the linking agents were clearly in a position to develop new skills from training (as well as share new learnings from their experiences), both had a substantial investment in the outcome.

- *Planners and learners: roles and relationships.* It should be understood that in addition to its role as a provider of linker training and support, Consortium Central staff were also responsible for the management and coordination of the overall project. These two roles, when joined, sometimes comprised conflicting functions similar to those faced by school principals responsible both for supporting teachers and for evaluating them. At the same time that Consortium Central staff needed to be (and be perceived as) accessible and helpful, they also needed to monitor progress and coordinate activities across the project.

  Another issue of roles and relationships that influenced the development of training and support activities derived from the fact that the six linking agencies participating in the Consortium regarded each other as peers. Given the agencies' prior histories of interaction and collaboration, the linkers and the agency supervisors were somewhat resistant to Consortium Cerntral's role as the "training expert" within this project. While Consortium Central felt that responsibility for linker training and support rested with them, there was some expectation among the linking agencies that this aspect of the project would be mutually shared. Having Consortium Central take the role of trainer implied, perhaps inaccurately, "We know more than you do."

  What evolved as a result of a number of exchanges among the linking agents, their supervisors, and the Consortium Central staff was a framework for collaborative work and planning with regard to training. Such collaborative planning increased the opportunities for linkers (and their supervisors) to influence the nature and direction of training and support activities. Being able to influence, in turn, helped neutralize some of the friction inherent in the conflict of roles (supporters who were managers) and relationships (peers who were responsible for being "experts").

Effective linker training: some recommendations. The following recommendations for the development of linker training and support represents our understanding of what developed as a result of collaboration within the Consortium Project. We do not suggest that following these recommendations will eliminate all conflict from attempts to collaboratively develop agendas for training and support;

instead, we hope that our ideas will help others see what some possibilities for collaboration might be.

- Resources for learning: the broadest possible array. We learned that opportunities for learning come from many different sources. Despite the existence of and the need for a centrally coordinated linker support component, it is important that linkers also be encouraged to seek out and to initiate training opportunities external to the project. In our case, such opportunities were found in and around our host agency, in our exchanges with our peers, and in the extent to which we were able to use our day-to-day work in the schools as a source of on-the-job learning. The use of training resources that are external to the project structure does not have to compete with the project itself and can be an explicit feature of the project's support structure.

- Involving linkers in defining their own training needs. Involving linkers in defining (and refining) their roles, assessing their own needs for training and support, and developing processes for finding and using resources increases the likelihood that they will be willing learners. Linking agents should be involved in conceptualizing training and support activities at the program level, and should be in a position to renegotiate individual support needs and resources throughout the project.

- Collaborative planning of training and support activities. Unless specific functions are agreed to among members of a group to insure that collaborative planning will occur, in general, a few people will assume the major portion of responsibility for getting something done. Our experience with regard to linker training and support confirmed this bit of conventional wisdom as well as another: when plans and decisions are made without major involvement by members of the group, considerable energy must be spent selling the plans. If the energy of the group can be harnessed into sharing the load with regard to planning activities for training and support, then the decisions come from the group.

  This is not to deny the fact that a need exists to balance the activities and plans that the group can carry out with those that are, and ought to be, the province of the central coordinating unit. In retrospect it may have served us well to have established a "Training Design Committee" to further support collaborative planning and to help insure an appropriate balance among the needs of individual linkers, the needs of the linkers as a group, and the things that project management had a need to cover.

- Training: the broadest possible definition. The Consortium Project defined training in a broader context than "skills acquisition" workshops since that definition does not leave room for those aspects of our training workshops that were the most helpful and significant mechanisms for improving our abilities to perform as linkers. Our "training" included opportunities for group problem-solving with regard to specific work-related problems, planning meetings with project management staff, and sessions specifically devoted to peer sharing of information and experiences. Linking agent training seemed to work better for us as a collaborative sharing and analyzing of experiences, rather than as a forum for teaching discrete skills (e.g. communication skills, planning skills, etc.).

  If training occurred at a time when the content of the training related specifically to the work being done in the school, the skills and concepts were more immediately learned, used, and reinforced. The chance to plan and then conduct "feasibility" tests on those plans at the training workshop was invaluable. Instead of saying to linking agents "When you plan, remember to think about...," actual planning time and assistance was incorporated into the training meeting. Doing the work of setting goals, designing activities, and drafting materials and then having the opportunity to talk with others regarding projected or anticipated problems based on the plans made, limited the extent to which linkers were "flying by the seat of the pants," and provided reality-based training.

- Trainees as trainers: building on what linkers have done, using what they know. The Consortium linking agents were selected from established, successfully functioning linking agencies and were experienced and competent professionals who brought a wide range of expertise to the project. Given this group, or one like it, an effective training design must include a system for building on and making use of linkers' prior experiences by expanding their ability to use what they already know, and, by connecting them with resources that will make professional development a self-initiated experience based on individual needs.

SUMMARY

We have attempted to share our experiences and understanding about sources of training and support for persons working in the role of educational linking agent. Although we feel that we have learned much from our work in the Consortium Project and from a variety of activities for training and support, we are aware that our comments reflect a view of a single project and of one group of linking agents. Still we think that what we have noted can be used by others who work in similar ways.

Our experience has confirmed that training and learning are continuous processes that seem to be optimally beneficial when the learners collaborate in planning their own learning and when opportunities exist for sharing and analyzing reality-based experiences with other linking agents.

Another important outcome of our experience is that we have changed the way that we think about what training is and might be. It is one thing to manage, coordinate, and then stop to receive instruction. It is another thing to manage, coordinate, and learn simultaneously. We have found that having opportunities to work with and learn from others engaged in similar activities, in an environment rich with resources and opportunities to use them is an important and effective form of linker training.

Finally, our experience has shown that there is a great deal of the linking agent's job that can (and perhaps, must) be learned "on the job." Learning by doing has taught us much about how to apply organizational assessment skills in the "real" world of schools, how to determine the appropriateness of specific strategies for helping staff make decisions, and how to work and interact with the many levels of community, school, and administration.

Learning by doing has also taught us that successful program improvement takes time. We meet. We do things. We plan. We work. We meet again. And all of the things that we know about schools suggests that it has never been otherwise.

Reference

Hall, Gene. E. The Concerns Based Adopotion Model: A Developmental Conceptualization of the Adoption Process Within Educational Institutions. Austin, Texas: University of Texas Research and Development Center for Teacher Education, 1974.

The Consortium in Action: Some Perspectives

Harry Osgood has been a classroom teacher, building level administrator and, for the past ten years, program director at Area Cooperative Educational Services (ACES), an intermediate service agency in New Haven, Connecticut. He has been actively involved with information dissemination programming since 1970, and as current director of the Professional Growth and Development Center within ACES, Mr. Osgood is developing a plan to integrate the delivery of information resources, technical assistance, and staff development services. He has consulted for the U.S. Office of Education, the ERIC system, the National Institute of Education, and served as the Connecticut Agency Supervisor with the Consortium since the project began in 1976.

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Over a three year period, the Consortium has attempted to offer a delivery vehicle that directly involved school members in the benefits of the R&D process. With this goal in mind the Consortium has nurtured and encouraged a close and mutually collaborative effort, utilizing the services of linking agents, while working to solve some real problems facing schools. An added feature has been an active attempt to document all processes so as to enable researchers to gain better clarity concerning how schools organize for, manage, and sustain change efforts for the improvement of local practice.

As an agency director, I have been in a position to treat the Consortium as a model building opportunity, being in close communication with six linkers over a three year period. An attempt has been made in this paper to encapsulate the many interactive features of the Consortium through the vehicle of two transactional models. SECTION 1: THE CONSORTIUM AS A TRANSACTIONAL MODEL FOR THE IMPROVEMENT OF LOCAL PRACTICE introduces these models, defines and elaborates upon certain components, and provides some initial interpretations.

An area which is not covered by the models, although integral to implementation within any change effort, is the nature of innovation itself. For this reason, Section II: FROM INNOVATION TO EXNOVATION: SOME REFLECTIONS AND LEARNINGS devotes a good deal of attention to this topic; provides an abridged review of the literature; offers additional assumptions, definitions, perspectives, learnings; and briefly discusses conditions related to Routinization and Exnovation as the forgotten processes.

SECTION 1: THE CONSORTIUM AS A TRANSACTIONAL MODEL FOR THE IMPROVEMENT OF LOCAL PRACTICE

Synopsis of the Project

The Consortium was a configuration of geographically dispersed and typologically different agencies that pooled monies from an existing program source so that collaborative time, effort, and knowledge could be directed toward attacking a common problem -- the improvement of local practice (in the area of reading at the elementary level, defined as being K-9). A common set of strategies and documentation techniques were employed by all from initial site development through implementation and use of a locally selected research and development outcome. Although, at times, the basic organizational structure of the Consortium seemed unstable and the size created some difficulties for coordination, the advantages to each and all components have far outweighed any logistic disadvantages. The Consortium prime contractor became an equal partner, neither dominant nor directive, and gains were made by its dynamic relationships with the other Consortium agencies.

The Consortium utilized the services, in each of its six states, of a linking agent -- an emerging professional role which has become better defined as a result of the work of linkers across the entire R&D Utilization Program. The linker role involved the complex task of moving new concepts, procedures, materials, and structures from research and development into everyday educational usage. The role, it was found, can and often does, shift from *managerial* -- joining research and practices; to *developmental* -- subjecting the results of research and development outcomes to the test of practical use; to *implementary* -- translating research and development material into operational procedures. These roles are not meant to be all inclusive; other roles include *advisory*, *political*, *advocasorial*, and more. A critical service to school personnel regardless of the role played was that the linker's follow-through was both explicit and maintained.

The initial formulation of the Consortium was derived from a combination of important aspects of the nature of change and innovation from the bulk of relevant literature and from the varied input of participating linking agency practitioners, the vast majority of whom had been previously involved in a similar, albeit somewhat abbreviated, process. Formalized approaches worked well because expectations were understood, commitments were clear, financial resources were accounted for, and feedback to the schools was sustained.

Nature of the Model

Transactional models have been designed (see Figures 1 and 2) because it was felt that features specific to the Consortium would lend themselves to such modeling. These models can be described as being both dynamic and static: dynamic, because they attempt to portray the transactional and directional aspects inherent within the Consortium's workings (including degrees, from practice, of dissonance and consonance with Consortium design); static, because they do not indicate the cyclical nature of certain aspects (both anticipated and non-anticipated) within Consortium design, such as occurrences of re-assessment, false starts, re-selection, re-training, staff changes, and the like. These formulations are displayed as modified cubes that attempt to indicate the inter-relationships between (A) Levels of Involvement (left vertical -- in Figures 1 and 2), (B) Phases Toward Routinization (left diagonal -- Figure 1), and (C) Delivery Concerns (left diagonal -- Figure 2).

The structure and logic of the components which the models depict are as follows:

A. LEVELS OF INVOLVEMENT -- indicates the entire system in which the Consortium program existed (save only the inclusion of an overlay depicting Consortium Central -- the prime contractor -- and the National Institute of Education's RDU Program). At the center of the system is the learner for whom all project related activity and local improvement effort is directed. Acting upon the learner is the instructional sub-system in which implementing teachers provide the newer learning arrangements and activities. Supporting and facilitating instruction are administration and management activities. Impacting upon both instruction and management of the school or district that provides the financial arrangements, while supporting or influencing the setting are the "good will" needs and demands of the community. The Decision Making Group comprised of teachers, administrators, parents, and reading specialists has proven to be an effective design for the vital tasks associated with problem identification, needs synthesis, and action plan development.

B. PHASES TOWARD ROUTINIZATION -- indicates that infusion of a selected R&D outcome into a school's curriculum (and hopefully into a school's standard practice) occurs in at least three (3) primary phases:

1. Mobilization -- which determines what needs are to be addressed, what solutions exist for that purpose, what action steps are necessary to address the needs;

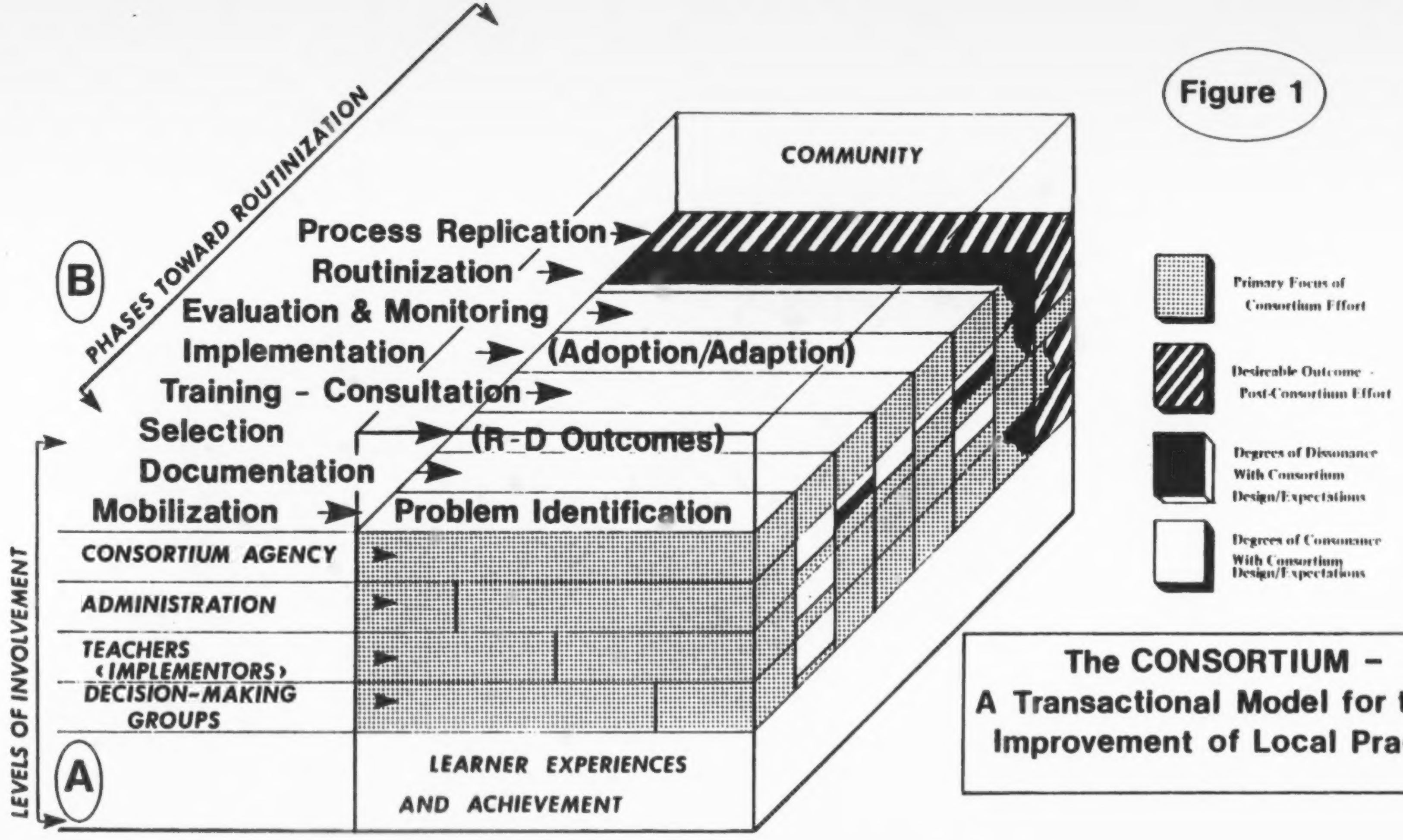
2. Implementation -- which program/practice among available solutions are most appropriate to meet the identified needs; and

3. Routinization -- which determines how the program will be maintained or continued.

As indicated by the models, an effective delivery system must exist to address itself to each of these phases if control for and achievement of the adopted program outcomes are to lead to their continuation.

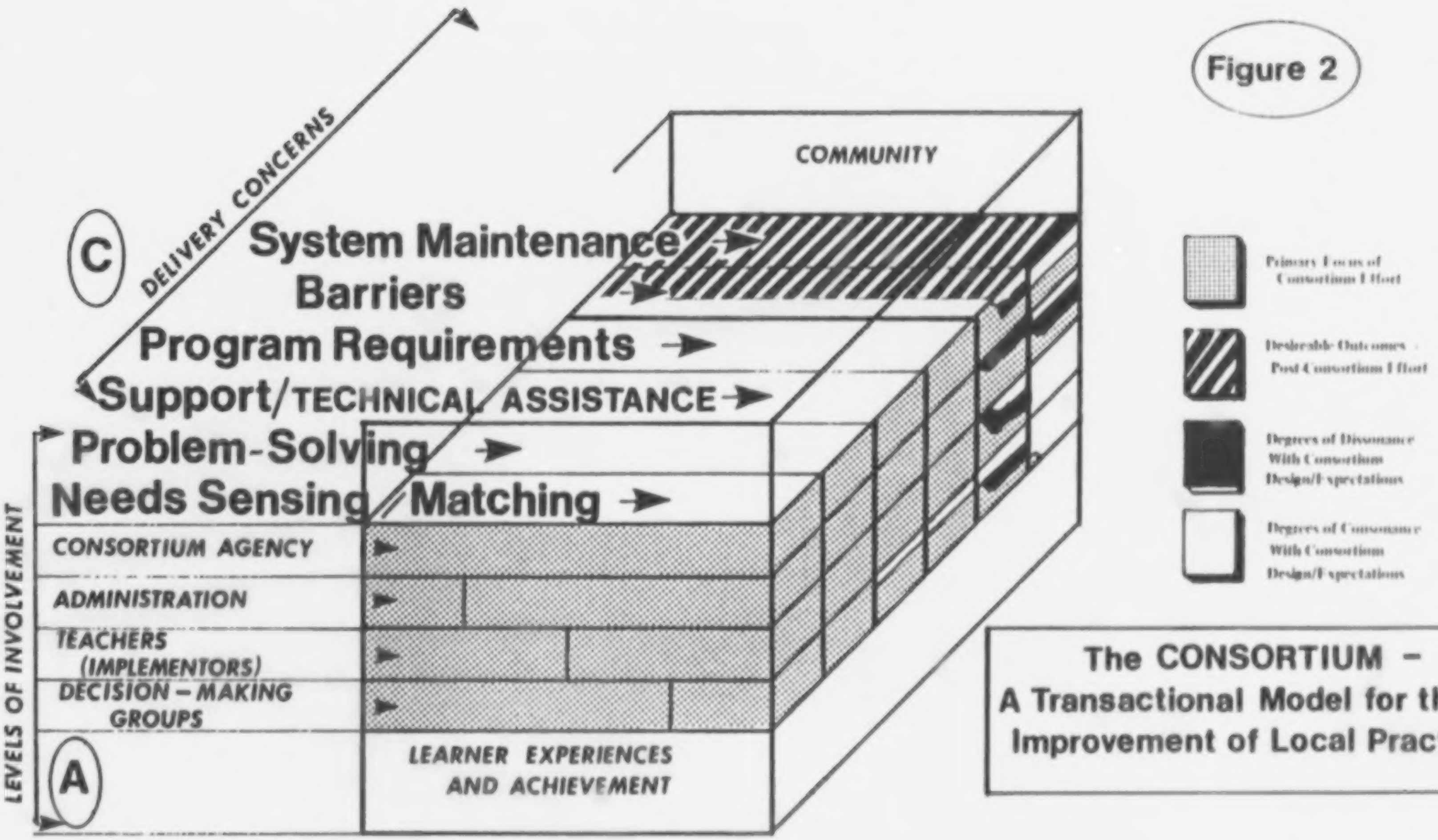
C. DELIVERY CONCERNS -- indicate the major focal areas which the Consortium set out to specify and examine in conjunction with each of the (A) Levels of Involvement and (B) Phases Toward Routinization. Indicated in Figure 1 are different areas to shading. The ▦ represents the local (per-state-per-site) actors who were critical to the Consortium design -- those being: (1) LEA Decision Making Group (DMG), (2) Instructional Staff (implementers), (3) Administration (building and central office), and (4) Consortium Agency (per state linking agent and agency supervisor). This shading also represents the primary focus of the Consortium effort by each level of involvement. Three additional areas of shading are included to represent (a) desirable outcomes -- post Consortium effort, portrayed as ■ ; (b) degrees, through practice, of dissonance with Consortium design/expectations, portrayed as ▨ ; and (c) degrees, through practice, of consonance with Consortium design/expectations, portrayed as □ . The right diagonals and verticals portray the composite of transactional outcomes related to phases leading toward routinization. It should be noted, however, that because of the duration of life of the Consortium (3 years), full routinization of the adopted program/practice to standard practice would not be observed, as requirements implicit within the process involve time and practice that surpassed the life expectancy of the Consortium. Additionally, process replication would be a desirable outcome (and in some cases occurred); however, focused attention to this outcome went beyond the scope of work plan called for by this Consortium design. The regions of dissonance and consonance speak for themselves and should be seen as specific areas for attention in any recycling of a Consortium-like effort.

Figure 1



The CONSORTIUM -
A Transactional Model for the
Improvement of Local Practice

Figure 2


DELIVERY CONCERNS
C
System Maintenance
Barriers
Program Requirements
Support/TECHNICAL ASSISTANCE
Problem-Solving
Needs Sensing/Matching
COMMUNITY
LEVELS OF INVOLVEMENT
CONSORTIUM AGENCY
ADMINISTRATION
TEACHERS (IMPLEMENTORS)
DECISION-MAKING GROUPS
A
LEARNER EXPERIENCES AND ACHIEVEMENT
Primary Focus of Consortium Effort
Desirable Outcomes – Post Consortium Effort
Degrees of Dissonance With Consortium Design/Expectations
Degrees of Consonance With Consortium Design/Expectations

The CONSORTIUM –
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Improvement of Local Practice

Figure 2 contains the same areas of shading and for the same portrayal reasons. Figure 2 repeats (A) Levels of Involvement (Left Vertical) and (C) Delivery Concerns (Left Diagonal). The right diagonals and verticals portray the composite of transactional outcomes related to concerns of a delivery nature. It should be noted that, because of the Consortium design, Consortium agency concern and action associated with Barriers and System Maintenance/Accommodation/Restructuring were largely a local matter and beyond much impact by either the linking agent or agency supervisor. Occasions presented themselves where attention was specifically focused upon these areas by Consortium agency representatives and local administration, with some success; however, both remain issues for local initiative and resolution with room only for cautious intervention from outside.

The regions of dissonance and consonance again speak for themselves. It may well be, however, that timing as well as the effects of phasing caused an incrementally diminishing involvement with delivery concerns. It can also be said that the trusting and working relationships maintained throughout Consortium life, through the many interventions on the part of the linkers, diminished both the need for and the effect of concerns for delivery. Both the approach of the end of Consortium involvement plus an increase in local confidence in their own ability to carry forward and manage the change may also be contributors.

An area which is not covered by the models, although integral to the implementation and use of any change effort, is the nature of innovation itself. Although Section II devotes a good deal of attention to this topic, some areas to consider about any innovation which influence its delivery include: the degree of its divergence from the existing program(s), communicability of information, demonstrability, complexity, flexibility, the source of change (linking agent), and the composition and direction of the decision making body or bodies.

On the following pages is an attempt to further elaborate upon and define certain components of the transactional models. (Certain elements of these elaborations and definitions were adapted, because of their appropriateness, from "An Initial Model of Environmental Educational Curriculum Delivery Design," a preliminary product of a current study being conducted under the auspices of the Far West Laboratory for Educational Research & Development, San Francisco.)

The components of the Transactional Model depicted in Figure 1 are further defined below.

A. Levels of Involvement

COMMUNITY	State Departments, school boards, special interest groups -- elements surrounding or outside the school or system. Functions: political and financial arrangements, educational goals, and district or school goals and policies related to these.
CONSORTIUM AGENCY	Intermediate service agencies, local education agencies, university-based service unit, educational laboratory, independent service agency, state department/local education agency collaborative. Functions: project coordination for both action research and delivery concerns; roles associated with: mobilization, problem identification, documentation, selection of R&D outcome, training, adoption, implementation, evaluation and monitoring, routinization, problem-solving, linkages, financial assistance, communication, and the like.
ADMINISTRATION	District superintendents, principals, department heads, project coordinators, project teams. Functions: resource allocation; school, program, or project policies; educational objectives, getting or providing approvals; allocating support funds; scheduling accommodations; ensuring number and types of personnel available; concerns with R&D outcome selection, training, implementation, and use; barriers, documentation, evaluation; and monitoring, routinization.
DECISION MAKING GROUPS	Teachers, parents, administrators, reading specialists, Consortium linking agent. Functions: instructional and learning arrangement assessments in the area of reading, needs assessment, problem

	identification, local school or system capabilitiy assessment, problem-solving, R&D outcome assessments and explorations, consensus building on an R&D outcome for trial and implementation, evaluation and monitoring, routinization concerns.
LEARNER EXPERIENCES AND ACHIEVEMENT	Students (elementary-defined as being from grades K-9; in the area of reading) Functions: reading skills, knowledge, attitudes development; behavioral and/or attitudinal changes; achievement.

B. Phases Toward Routinization

These phases are not strictly linear, but are dynamic, cyclical, and interconnecting in the sense that each one contains smaller-scale aspects of the others.

MOBILIZATION	System readiness activities, preparation and support, Consortium design sharing; includes problem-solving, goal setting, action plan development, site and participant selection, eliciting interest and support.
DOCUMENTATION	Consortium (as an action research and service project) required periodic documentation of the processes and phases of the project; linking agent elicitation of key actor support and participation; compilation and preparation of periodic documentary deliverables.
SELECTION	Following problem-identification, problem-solving; linking agent presentation of available R&D outcomes matched to needs; R&D outcome assessments, selection of an R&D outcome for adoption.
TRAINING AND RE-TRAINING	Training arranged for by linking agent; coordination of efforts and details between local site trainees and administration and developer staff for training delivery; ongoing consultation needs development; re-training provided as necessary or desirable; partnership arrangements reinforced.
IMPLEMENTATION	Activities and actions specific to selected solution requirements; includes tryouts, practice, mutual adaptation of activities and

	attitudes; barriers identification and resolutions sought; multi-level communications necessary; technical assistance needs met through linking agent intervention.
EVALUATION AND MONITORING	Local, Consortium agency, and Consortium central plans synchronized for optimal usable data; process monitoring, problem identification, problem solving, needs assessment, necessary technical assistance interventions; checks on the "health" of the project periodically; reporting preliminaries to system and Consortium decision makers.
ROUTINIZATION	Transferral of program to standard practice; displacement (as necessary) of less effective reading program or strategy; maintenance and continuation activities; resource allocation or re-allocation; includes broad-based mobilization, long-term outcomes, ongoing evaluation continued development/refinement, modification, improvement.
PROCESS REPLICATION	A hopeful outcome of Consortium effort; ultimate test of the problem-solving process employed by Consortium; tendency to better utilize needs assessment, identify problems, establish problem-solving groups, look to R&D outcomes for solutions; repetition of the process, in general, would indicate a significant change in local capacities to plan for, solve, and manage their improvement efforts.

C. Delivery Concerns

NEEDS SENSING/ MATCHING (capacity assessment)	Assessment and specification of reading needs from extant data or specific needs initiative; expected short and long-term impacts, implementation requirements, feasibility analyses, local capacity assessment, and barrier(s) identification; establishment, by consensus, of a needs sensing mechanism for life of the project; issues of space, facilities, scheduling, released time, substitutes.
PROBLEM-SOLVING	Needs isolation; action plan development; problem resolution options; elicitations of interest and support to proceed; consensus

	building on needs to be addressed, short and long-range expectations, a plan or plans to be followed, who participants are to be; roles and expectations of all actors, the linker's role, benchmarks for progress, how reassessments and plan amendments will occur, documentation needs explained and accepted, cross checks for understanding and acceptance; action plan with next steps on financial commitments finalized.
SUPPORT/ TECHNICAL ASSISTANCE	Financial support and technical assistance expectations integral part of finalized action plan per site; acceptance of linking agent role and expectations congruence; issues of space, facilities, scheduling, released time, substitutes resolved and communicated; role of Consortium agency with documentation needs and expectations; further problem-solving and trouble shooting; implementer sharing exchange state-wide and local; local resource re-allocations explored; alternative sources of funding identified and secured as ancillary needs develop.
PROGRAM REQUIREMENTS (Goals & Objectives)	Includes commonly shared awareness of selected program activities, attitudes and action; goals and objectives, short and long-term outcome expectations, ongoing evaluation, areas for adaptation; functional "fits" with rest of curriculum, program administration, instruction.

Program Requirements are also dependent upon a number of assumptions and interdependent actions as previously highlighted. The program selected for adoption and implementation assumes that selection was made based on a number of characteristics. Some of the more important characteristics and detail concerning each are provided below.

I. PROGRAM REQUIREMENT CHARACTERISTICS:

Includes specifications, capabilities, structure, functions for curriculum, evaluation, program administration, instruction.

A. Adequate Design Methodology - assessment and specifications of needs, short and long-range impacts, implementation requirements (as previously mentioned and below), feasibility analyses (see Barriers), implementation procedures and arrangements (see Delivery Strategies).

B. Manageable Scope - size of project, sufficient and appropriate staff, costs.

C. Adequate Resources - facilities, people, time, financial resources, information sources, instructional materials.

II. TIMELY IMPLEMENTATION OF INNOVATION

A. Effective Leadership -- project direction, principal implementors; technical skills in planning, organizing, supervising, delegating, coordinating.

B. Appropriate Staff Characteristics -- dedication, commitment to local improvement, cohesiveness, high morale, higher expectations, professionalism, flexibility; adequate knowledge, skills, and attitudes.

III. GOOD COMMUNICATIONS BETWEEN AND AMONG STAFF

IV. INCENTIVE SYSTEMS -- (for teachers, principals, administration), money motivation, self-development, skill development, good public relations, "specialness" of the district's efforts.

V. TEACHER TRAINING -- available from the initial developer(s) of the program/practice under adoption; the appropriateness of the developer's training design to local needs; the flexibility of the developer to accommodate local needs -- including reformatting, based upon information as to the entry levels of those to be trained.

VI. ADEQUATE SPACE AND FACILITIES

VII. ADEQUATE SCHEDULING -- provision for released time of implementing staff for training, on-going planning and development, statewide and local exchanges for progress up-dates.

VIII. DESIGNED-IN CONTINUATION STRATEGIES -- administrative commitment at all levels, parent involvement, board of education presentations and up-dates, sharing with faculties of same and system schools, featured as a part of ongoing staff development program, identification of known and potential resources for re-allocation or application.

IX. APPROPRIATE AND TIMELY FEEDBACK -- from and to all elements involved with the project; built-in evaluation and assessment at every level and for every aspect of the program.

X. APPROPRIATE EVALUATION MEASURES -- for students, teachers, administration, project as a whole.

XI. PARTICIPATORY PLANNING AND PROBLEM-SOLVING -- students, teachers, administrators, parents, interest groups.

XII. CURRICULUM CONTENT WITH A CORE SET OF "NON-DISCRETIONARY" CONCEPTS AND SKILLS -- an inviolate central core which requires a set of activities and actions to determine if a same or similar outcome can be realized; for evaluation credibility and project integrity.

BARRIERS: Constitutes obstacles, constraints, resistances to developing, implementing, and continuing the program/practice under adoption.

1. TYPES OF BARRIERS

   A. Low Level of Expectations -- student capabilities, staff capabilities, school capabilities.

   B. Conflict -- ideology, values, role discrepancy, educational goals (ex. primarily concerned with "back to basics")

   C. Limited Financial Resources

   D. Organizational Rigidity -- inflexible decision making and role structure, over-standardization and routinization, territoriality, rules, regulations.

   E. Inadequate Communications -- within school, system, to community.

   F. Inability to Perceive Need for Change or Improvement

   G. Lack of Adequate Resources -- appropriate instructional materials, equipment, staff, outside consultants.

   H. Ineffective Leadership and Administration -- lack of technical skills in planning, organizing, supervising, delegating, coordinating, research and evaluation.

I. Work Overload -- excessive demands upon time, skills, lack of private time.

J. Problems With Staff

K. Lack of Support/Participation -- from leadership, administration, staff, teacher groups or unions, parents.

L. Primary/Elementary/Secondary Teacher Inter-relationships

M. Active Resistance - teacher unions, political groups, teachers who have been "turf" building, community, administration, board of education in part or whole).

N. Lack of Incentives

O. Inadequate Dissemination Plans or Capabilities

SYSTEM MAINTENANCE/ACCOMMODATION/RESTRUCTURING:

-- should be self explanatory as should also be the educational "atmosphere" in which such measures could/would most likely become realized.

TYPES OF SUPPORT FOR MAINTAINING, ACCOMMODATING, RE-STRUCTURING

-- includes people, money, approvals and arrangements between teachers, parents, school or district administration, community groups.

A. Adequate Funds and Time Arrangements -- for such activities as necessary substitutes; intra-school or system staff development on project outcomes, merits, achievements.

B. District Approval -- a commitment to local improvement and the need for change.

C. Principal Cooperation and Assistance

D. Responsive and Supportive Parental and Community Attitudes

E. Incentive Systems -- school, district and community encouragement for improvement, growth and development

F. Support for Continuation Strategies

TYPES OF DELIVERY STRATEGIES

-- includes tactics, procedures, arrangements, actions for overcoming barriers associated with implementing and continuing programs/practices under adoption.

A. Information and Linkage Development -- regular meetings, conferences, mailing, surveys, linking agents, demonstrations, information resource utilization, network building.

B. Local User Involvement -- (principal, teachers, administrators) -- in procedures, decision making; materials use, planning, training continuums.

C. Training -- (see previous notes).

D. Modeling -- tryouts, pilot tests.

E. On-Going Feedback -- formative evaluation and formal, summative evaluation.

F. Teacher Observations -- similar projects, other classrooms, schools, districts.

G. Providing Incentives -- pay for training, capitalizing upon whatever incentives are extant within the system or school.

H. Direct Parent Involvement

I. Principal Participation -- in training and regular program and project meetings.

J. Gradualism -- incremental innovation versus total or mandated implementation.

K. Locate and Cultivate Alliances -- industry, business, press, citizen's groups, parents, like-teachers and administrators.

L. Resource Acquisition, Development, and Maintenance -- educational materials, financial resources, facilities, re-allocations, incentive funds.

SECTION II: FROM INNOVATION TO EXNOVATION - SOME REFLECTIONS AND LEARNINGS

Some Perceptions on Educational Innovation

> ... external causes are the conditions of change and internal causes are the basis of change ... external causes become operative through internal causes. In a suitable temperature an egg changes into a chicken, but no temperature can change a stone into chicken, because each has a different basis.
>
> (Tse-Tung, Mao)

To understand some of the many aspects and a few of the assumptions associated with, as well as the many implications for use of, educational innovations, is to recognize the appropriateness and the limits of the temperature, egg, stone, and chicken metaphor as presented above.

Any innovation, whether proven or promising, that is imposed upon a school system in the absence of internal receptivity is not unlike heating a stone and waiting for the birth of a chicken. A basic incompatability then exists between the intervention and the system. If it is chickens that are desired, heating stones is a fruitless endeavor!

Much of the success and failure of educational innovation for school systems can be traced to the simple truth inherent within that metaphor. Because of active internal resistance (Walton, 1975) occasioned by real or imagined incompatibilities between existing configurations of interests, many innovations fail to take barriers and resources and the nature of the innovation under consideration. Since educational innovation is often equated with "progress" (and is often used as a synonym for "change") the strategic issue, for the innovation advocate, becomes one of either and more how to:

(1) package the innovation in ways which will decrease resistance,
(2) reshape attitudes and perceptions of school staff in ways which will decrease resistance, or
(3) recombine interests and resources in ways which will reduce resistance.

It is of particular interest to note that these strategic issues are not only quite different by nature, but require uniquely different types and levels of skills. The first is essentially a marketing strategy, the second an educational strategy, and the third a structural or institutional strategy.

Management and organizational researchers generally accept the implicit value of the metaphor, and have tried to determine what combinations of environment, personality, and structure facilitate adoption of innovations (Baldridge and Burham, 1975). As a result, a good deal is known about influences upon adoption behavior -- enough to permit texts to be written (Rogers and Shoemaker, 1971; Zaltman et al., 1973) -- and prescriptions have been advanced for those interested in facilitating that behavior.

Much can and should be learned from this and the related literature that has sprung from other fields and specialties. In the field of education, however, not enough is known concerning the combinations and inter-relationships of educational environment, professionals, and structure, as well as their collective or singular effect upon behaviors associated with the adoption through routinization of R&D outcomes or innovations. Although educational research is of neither sufficient quantity or quality so as to enable texts to be written concerning influences upon adoption-implementation behavior or specific prescriptions for facilitating that behavior, much has been done and is being done, nationwide, which focuses upon this relatively new educational endeavor. The Consortium has been a significant one of these efforts.

While the metaphor, as presented, has its merits, it also has its limits. In the complex mix of styles, strategies, goals, and aspirations which comprise the operations of school and school systems, it is not safe to say that everyone, nor even a significant sub-set, is seeking chickens. Multiple, often competing, individual and group goals make determination of system goals problematic and measurement of (educational) performance and effectiveness difficult. Because some system members are advocating heating systems, some protecting stones, others laying eggs, while still others are looking for chickens, the simple truth of the metaphor, although obvious in general, needs to be amended. The rationality, order, and simplicity which make the metaphor attractive can be imposed by the observer and become reflected in what gets written and what gets prescribed. Recognition of other forms of rationality rooted in diversity and complexity -- and hence other bases for prescription -- is the beginning of a different form of learning and opens the way for different perspectives on educational innovations in general and adoption strategies in particular.

What comprises the innovation resource pool? How comprehensive has this pool become? How are adopting schools and systems affected? How should or are such systems likely to respond? What are the internal politics of innovation adoption? What internal and external assistance is necessary? How much training is necessary or desirable? How does one know when local improvement has been achieved? It has been with the need to address these questions and more, that the Consortium came into being.

Some Reflections - Definitions and Perspectives

Assumptions

Across all fields, the general topic of innovation has inspired vast amounts of research, theorizing, speculation, and wishful thinking. Innovation is advocated daily by all manner of philosophers, journalists, politicians, industrialists, economists, and social reformers -- to name a few.

This preoccupation with innovation is interesting in itself. Innovation tends to be viewed in positive terms socially: it is a good thing, both to advocate and to participate in. For the most part, researchers have assumed that innovation is good and have sought to determine the conditions under which innovation takes place, the conditions which facilitate its diffusion and the characteristics which distinguish more innovative individuals, groups, and organizations from less innovative ones. One implicit assumption appears to be that research should foster innovation. Additionally one can point to the aggregate of various educational legislation, over the course of the past two decades, and easily recognize the positive terms in which innovation has been viewed and is being viewed at both the federal and state levels (albeit in a more delineated and focused way of late).

Although research on innovation spans numerous disciplines and substantive areas (Rogers and Shoemaker, 1971), two distinct perspectives can be applied to an analysis of educational innovation: (1) the adoption perspective, and (2) the diffusion perspective.

Adoption Perspective

I. Theoretical Issue -- understanding what makes a school or system responsive to change in its environment.

II. Specific Issue -- understanding what makes one school or system more receptive to change than another.

III. Normative Question -- how a school or system should be structured in order to enhance responsiveness in general and receptivity to change in particular.

Diffusion Perspective

I. Theoretical Issue -- understanding why and how an innovation (or group of innovations) spreads within a school or system.

II. Specific Issue -- understanding how a school or system becomes interested in promoting diffusion.

III. Normative Question --

(a) for a school or system interested in promoting diffusion, how an innovation should be presented and tested so as to enhace rapid and widespread acceptance;

(b) for a school or system interested in promoting diffusion, how an innovation, once implemented, tested, and accepted, should displace a less effective yet concurrently operable practice.

Educational Innovation -- Some Definitions

What is educational innovation? Although seemingly somewhat straightforward, as a question, one must begin to respond by saying that it means different things to different people in different contexts. One problem in providing an answer is that increasingly widespread use of the concept of innovation has diluted its functional precision. A review of a sample of definitions, provided through the literature-at-large, has revealed that the term presents two points of disagreement among researchers.

First, some have defined innovation as a process (Schon, 1967). Others have defined it as a discreet product or practice (Aiken and Hage, 1971; Rogers and Shoemaker, 1971; Zaltman *et al*., 1973). As a result, Schon argued that, "Innovation will mean the process of bringing inventions into use." Rogers and Shoemaker, on the other hand, contend that

"An innovation is an idea, practice, or product perceived as new by the individual."

The criteria that should be used to identify something -- whether process or product -- as innovative have also been debated. Among those who see innovation as a discreet product or program, some see the criteria of newness emerging from the relationship of the practice/product to the state of the art in the field out of which it originated. Only if a new product/practice differs in significant ways from previous products/practices can it be called an innovation.

Other researchers see the criteria emerging from the relationship of the product/practice or program to the system that is adopting it (Zaltman et al., 1973). This view follows that something should not be called an innovation unless the adopting system perceives it as such.

There are also differences among those who see innovation as a process. Some use the term to refer to the process of implementing an invention (Schon, 1967), whereas, others use the term to refer only to those instances in which the process of implementing a change results in a major restructuring of the adopting system (Wilson, 1966).

These two areas of disagreement, about what innovation is, yield at least two important implications:

1. They indicate the need for caution in interpreting and comparing the results of studies of innovation by demonstrating that a group of researchers may be talking about quite different phenomena when they discuss the topic.
2. The disagreement also suggests the importance of the differences, and of the need for establishing a clear conceptualization of educational innovation to provide a common frame of reference and discourse for both school practitioners and researchers.

A Working Definition

Given the literature-at-large on this topic plus some of the learnings which have been derived from the primary activities associated with Consortium efforts, the following is offered as a basis for a working definition of educational innovation:

An educational innovation is any program, product,

> or technique which represents a significant departure from day-to-day instructional endeavors at the time of its introduction and which affects the nature, location, quality, or quantity of information that is, or becomes, available in support of the local decision making process.

Some Learnings

In contrast to much of the literature, this definition does not conceptualize educational innovation in process terms. Diffusion is a process whereby an innovation spreads within a population; adoption is a process which results in a decision by a potential adopter to invest time, effort, and resources in an innovation. Diffusion, adoption, and implementation are all viewed by local practitioners, as processes; whereas, innovation is not!

Applying these definitions against the totality of the Consortium itself, it was of particular interest that, from a local practitioner perspective, the Consortium was viewed as an innovation! Pressing further upon this perspective yielded the fact that some of the Consortium's contributing features were viewed as follows:

(a) innovation -- pool of R&D outcomes, Decision Making Groups, funding pattern, linking agent, problem-solving, and action research;

(b) process -- selection of R&D outcome, implementation, problem-solving, adoption, and diffusion (with routinization viewed as a process verging on innovation).

Additionally, it has been learned that the unit of change is the single school building and its immediate community. It is essentially unrealistic to expect a school system to change because school systems do not teach -- principals and teachers teach students, and, although system level support is an essential element, the basic unit of change is where students are, at the building level.

It has also been learned that a small amount of financial assistance can make a tremendous difference in some schools! In fact, this learning has brought to light an encouraging insight amidst one of the starkest realities facing schools today. There appears to exist the beginnings of a new optimism in the face of declining resources; a notion that as much, or more, can be achieved, at the classroom level, with significantly fewer dollar resources than before. Generally, practitioners are beginning to accept that fresh, new approaches to problem-solving are both necessary and possible. With "turf-building" no longer an acceptable or tolerable phenomenon (in fact, a direct product of previous funding patterns), local practitioners seem to realize that they can now afford the luxury of meshing resources that can be focused upon real problems affecting their students!

Given these emerging reactions to hard conditions and refreshing perceptions of local capabilities, a greater potential can be said to exist for more frequent engagement in problem-solving and innovation seeking behaviors. However, for this potential to become realized, local practitioners require the services of a technical assistance agency! It has been learned, through the Consortium, that a support agency, can provide a wide array of assistance in support of local change efforts; and, where the services and resources are available to overcome the barriers to change, most school personnel are vitally interested in improving the learning opportunity and process for children.

The Notion of Newness

It is important to emphasize that perceptions that can influence some potential adopters are closely linked to a central criterion of newness. Perceptions of newness by potential adopters can, and often do, influence their receptivity to a particular program, product, or technique. This can sometimes become particularly acute when the potential adopters perceive themselves as being actors within a setting where too many changes are being attempted at once --a condition sometimes referred to as "innovation overload." Although the import of perceptions regarding newness deserve more and closer examination, for the purposes of the Consortium, it is necessary to explore this notion independently from the perceptions of potential adopters because the goal has been to understand how and why different research and development outcomes (innovations) can be caused to be implemented and diffused within typologically diverse local education agencies; how and why they are implemented and diffused more or less completely; and how and why some schools or systems adopt certain innovations while rejecting others.

Enough has been learned through the course of the Consortium efforts to say that perceptions of newness by potential adopters have influenced their receptivity to particular programs, products, or techniques. An important strategy for introducing innovations has been to downplay their newness. Another has been to downplay tendencies for the innovation to become identified as the developer's solution (e.g., "The Atlanta Program.") School system members are more receptive if they do not perceive an innovation as a radical departure from the status quo. Perceptions of newness are, therefore, factors which influence receptivity, rather than a criterion for determining whether something is an innovation.

Another perspective, which appears to be commonly shared by many school members, is that the process of invention -- innovation development -- is viewed as being largely exogenous. This may also help to account for the fact that external assistance providers (e.g., linking agents) were so readily accepted by the vast majority of schools involved with the Consortium!

The Notion of Imitation

One of the more important characteristics of most educational innovations is that it is difficult to determine their direct effects upon adopting school performance. Although there is considerable evidence that profitability (broadly conceived) greatly enhances the diffusion of product/process innovations, there is no directly analogous criterion which might be applied to those which possess a managerial (classroom or administrative) component. When direct and independently verifiable measures of the contribution of a given innovation to performance are lacking, other criteria will be used in making the decision to adopt or not to adopt.

Local perceptions of the status of other schools or systems previously involved with the adoption of the innovation under consideration is one example of such criteria; in general, imitation is likely to play a more significant role in the diffusion and adoption of a managerially oriented innovation than a product/process innovation.

Phasing Toward Local Improvement

Why do some schools or systems adopt particular innovations whereas others do not? Why does a given school or system adopt some innovations and not others? What kinds of factors facilitate or impede adoption of innovations? Questions such as these are associated with specific concerns unique to the adoption of innovations while all relate to the general questions of how and under what conditions decisions are made to invest in the outcomes of research and development efforts.

Strategies for impacting upon local practice, as conceived by the Consortium, were possessed of little that could be labelled as being truly innovative. Many local improvement efforts have been attempted, through varying strategies and techniques, prior to the conception and funding of the Consortium. The dimension that was added by the Consortium, however, was its plan for assisting, documenting and evaluating the process. Another dimension unique to the Consortium is that the process, from its outset, called for and was successful in securing the involvement of both local innovators and maintainers! Although the phases leading toward local improvement may not be new (e.g., selection, adoption, implementation, evaluation, and institutionalization), a discussion regarding some perspectives and learnings that have developed because of the Consortium follows.

Adoption/Adaptation

Adoption itself, although the subject of much research, was only one outcome of interest to the Consortium design. Once adopted, an innovation may be more or less widely used and once in use, the survival of the innovation becomes problematic. Hence, from a design perspective, the Consortium began to take a growing interest in the "phases" of implementation within its participant schools.

At the risk of accenting upon the overly simplistic, the reader should be reminded that, it is individuals who become adopters and not their schools. This being the case, then there are adoption behaviors that can be observed and documented. In fact, the Consortium has sought to link adopter characteristics to their decision making which in turn links to their adoption behavior.

Untested Hypotheses

Although variations in patterns or organizational structure were not areas for empirical examination under the Consortium contract, it would appear that there are some hypotheses, related to adoption, which need to be tested:

- professionalism, leadership style, and the cosmopolitanism of administrators would likely correlate positively with general receptivity for educational innovations.
- because organizational size may moderate the effects of administrators' characteristics, the influence of one administrator may be more pervasive in smaller schools or systems, but not in larger ones.
- size, as measured by extent of a system's resources, is generally held to increase the likelihood of adoption.
- schools which actively seek external information, more frequently, are more apt to adopt innovations.
- the more complex or heterogeneous school systems encourage adoption of innovations as a strategy for coping with uncertainty that accompanies unpredictability.

Implementation and Use

The literature which attempts to examine the study of post-adoption behavior is nearly non-existent! One exception is the work of Zaltman et al (1973). Most of what exists in the literature discusses ways of predicting adoption and has ignored what happens after adoption.

This fact is particularly curious, for after a school has formally adopted a particular innovation, there may be considerable resistance to its implementation or further diffusion. If an innovation is to be effective it must be implemented and used.

Learnings, however, have yielded that a number of key factors are associated with successful implementation and use. These include:

(1) Procedures for entry of the innovation into the school system should be specified and understood.

(2) Central administration should be committed to the innovation.

(3) Any ambiguity about the nature and purpose of the innovation should be reduced as much as possible.

(4) Linking agents, and/or (internal) change agents, should be able to manage conflict effectively.

(5) Contingency plans for spin-off problems and sufficient flexibility are necessary.

(6) Compatibility between the goals of the innovation and the larger political context is critical.

(7) Innovation is most likely to be used if sub-unit(s) using it can evaluate it independently and make their own decisions about how best to implement it.

(8) A reasonable internal diffusion strategy, assuming widespread adoption and use is desired, is to encourage system sub-units to experiment with the innovation on its own and in the context of its own needs and setting.

Other key factors can inhibit or halt implementation or further use. These include:

(1) Administrator naivete and problems in role definition.

(2) Internal diffusion by fiat resulting in behavior adjustments that cause older ways of doing things to remain unchanged.

(3) When implementation hinges on the commitment of a key individual, and that individual leaves or is re-assigned, implementation can cease.

(4) Implementation and use of an innovation in one sub-unit of a school system does not lead naturally and inevitably to widespread use throughout the system (or for that matter, throughout the school!).

Because research on implementation and utilization of innovations has consisted primarily of case studies, generalizations should be made with caution!

However, it can be said that in the initiation of the pre-adoption stages a higher degree of complexity, lower formalization of procedures, and greater decentralization of decisions are required to facilitate the gathering and processing of information. Each of these conditions, as well as those that follow are diminished in intensity when an external linking agent is effectively utilized.

In the implementation stages formalized procedures, centralized decision making, and lower levels of complexity are required to reduce the likelihood of role conflict or implementation delays.

In the absence of widespread availability and usage of linking agents, these conditions must be assumed by local adopters and may, through the required shifts in conditions, account for a good deal of the "no-takes" or lack of diffusion that so often occurs when local innovators are left to fend for themselves.

Routinization and Exnovation -- The Forgotten Processes

Most researchers who have worked in the area have identified a series of stages or phases in the diffusion and adoption of innovations (Rogers and Shoemaker, 1971; Zaltman et al., 1973). The sequence is initiated when an innovation is developed or invented, continues as information about the innovation spreads within a population of potential users, and ends as an agency or school makes an adoption decision, implements the innovation, uses it, evaluates it, and makes a decision about continued use. Each phase in the sequence is necessary but not a sufficient condition, by itself, for the subsequent stage or phase to occur in an orderly or rational process. However, these conceptualizations may be based more in a presumption of rationality and order and may indicate more about the limitations of researchers than about the particular phenomenon of interest.

The stage or phasing perspective is oversimplified and there are important exceptions to the usual sequence which it implies. Adoption by mandate, (for example, proficiency testing, where potential adopters are required by law to adopt a particular testing instrument and program and are thus required to suspend their own evaluative faculties in the adoption process,) is one such exception. The point is that the extent to which rationality is an appropriate description of the process involved in adoption decisions is variable across cases. In fact, rationales for adoption may only emerge retrospectively unless they were an integral part of a planned, voluntary change process.

The foregoing not excepted, what consistently appears to be omitted from most descriptions of phases in the process is what happens at the very end. If little work has been done on implementation and utilization (and the wide array of problems and concerns associated with these phases -- a finding throughout the Consortium's efforts), almost nothing has been done on either routinization (an end option by which an innovation has lasted and become a virtual part of standard practice) or exnovation (an end option by which the innovation is terminated or removed from standard practice).

One notable exception to these otherwise undertreated end phases, is the Rand study (1975). According to this study, the decision to continue an innovation is integrally related to four critical considerations. These are:

A) The likelihood of its future success;

B) The importance of the educational need served by the project;

C) The resources required by the project relative to district resources; and

D) The organizational-political forces inhibiting or promoting the innovation.

Contributing Conditions to Routinization

Conditions unique to an innovation becoming routinized are all internal to the adopting agency or school (Yin, 1978). A specific pre-condition is that an internal innovator, an external agent, or the combination of both succeeds in securing training for some core group of practitioners within an agency or school, so that they will begin using the innovation and doing so as frequently as possible in order to cause the innovation to be seen in direct correlation with regular agency or school practices, rather than perceived as an exogenous project. Essentially, routinization is more likely to proceed if the innovation becomes part of a core agency practice (Yin, 1978). Under this configuration, the innovation can be routinized most effectively if the capability and/or inclinations for continuing an older or less effective practice is systematically removed after the newer practice has been installed.

This dual strategy is often forgotten or ignored by those who have supported an innovation. The reason for this inattention to detail is often the result of efforts associated with installing innovations. Unless bi-lateral or, at best, parallel efforts, yielding varied data on effectiveness, can be tolerated and funded by the same district or school, innovators can no longer fail to attend to strategies/policies needed to terminate older, less effective practices. Not to do so will inevitably cause a problem, the resolution of which may not always follow rational patterns, when competition for limited resources are sought by both old and new.

The issue may be delayed, but must eventually be faced! This is true if the innovation and steps in support of its implementation were supported, technically and financially, with external assistance -- as in the case of the Consortium. In fact, external assistance may be important to routinization if such assistance follows local initiatives and matches local needs and agendas (Yin, 1978).

Contributing Conditions to Exnovation

Exnovation and discontinued use of an innovation are not necessarily the same thing. There are important distinctions which can and should be kept in mind.

When should exnovation be expected?

The answer rests in reasons concerning why the district or school originally adopted the innovation. If adoption occurred because of a belief that the innovation would contribute in a direct and measurable manner to performance, then exnovation can take place for two reasons. First, a newer innovation may have been developed which performs as well or better than the innovation which has been adopted. The agency or school may then opt to adopt the newer innovation and dispose of the older one. The assumption is, of course, that schools can, in fact, evaluate the contribution of the innovation to performance criteria/

expectations, that they actually conduct an assessment, and that decisions about the future courses of action are based upon these evaluations. It is also assumed that the performance characteristics of the newer innovation can be reasonably estimated. Exnovation, under these conditions, occurs because of the intent to participate in further adoption of innovation.

Second, an innovation, once adopted, may not perform well enough to justify its continued use. Here, as with the first example, the assumption is that schools know -- or believe they know -- how well the innovation is performing. Exnovation, with this example, occurs because of poor performance, and does not necessarily result in adoption of an alternative innovation. The school may simply revert back to previous ways of doing things.

Exnovation can also occur for reasons unrelated to evaluations of performance. Changing administrative priorities, staff re-assignments, and changes in special populations to be served are but a few such reasons. Changes in conditions over which the school or system may have little, if any direct control such as interest, regulations, and availability of state and/or federal funds may lead to exnovation. Termination, however, can and should be anticipated as in the case of changes in administration (building level or central office) and as school systems learn or develop ways of buffering themselves against certain vagaries or constraints associated with federal support.

Finally, exnovation may come as the result of internal opposition generated by the impact of the innovation upon existing interests, power, and control. The point is that, schools need to know as much about when to dispose of innovations previously adopted or currently under adoption as when to adopt new ones. The overwhelming emphasis, in the innovation literature on adoption, is more a reflection of a pro-innovation value bias than one of thoughtful reflection upon managerial and system-wide needs and concerns.

BIBLIOGRAPHY

Aiken, M. and Hage, J. "The Organic Organization and Innovation." Sociology 5:63-82, 1971.

Baldridge, J. Victor and Burnham, R.A. "Organizational Innovation: Individual, Organizational and Environmental Impacts." Administrative Science Quarterly, 20: 165-176. 1975.

Baldridge, J. Victor and Deal, T.E. Managing Change in Educational Organizations. Berkeley: McCutcheon Publishing Co., 1975.

Berman, P., and McLaughlin, M. Federal Programs Supporting Educational Change. Vol. VIII: Implementing and Sustaining Innovations, Santa Monica, California: Rand Corporation, 1978.

Becker, S.W. and Whisler, T.L. "The Innovative Organization: A Selective View of Current Theory and Research." Journal of Business, 40: 462-469., 1967.

Culer, C.M. and Hoban, G.J., eds. The Power to Change: Issues for the Innovative Educator, I/D/E/A Reports on Schooling. New York: McGraw-Hill Book Co., 1973.

Human Interaction Research Institute, Putting Knowledge to Use: A Distillation of the Literature Regarding Knowledge Transfer and Change. Rockville, Md., National Institute of Mental Health (collaborator), 1976.

Lippitt, R., et al. The Dynamics of Planned Change. New York: Harcourt, Brace and World, Inc., 1968.

Rogers, E.M., and Shoemaker, F. F. Communication of Innovations. New York: Free Press, 1971.

Schon, D.A. Technology and Change. New York: Delacorte Press, 1967.

Tse-Tung, M. Quotations from Chairman Mao Tse-Tung. Peking: Foreign Language Press, 213-214, 1967.

Walton, R.E. "The Diffusion of New Work Structures: Explaining Why Success Didn't Take," Organizational Behavior., 3:3-22, 1975.

Wilson, J.Q. "Innovations in Organization: Notes Toward a Theory." In James D. Thompson (ed.), Approaches to Organization Design, 193-218, 1966.

Yin, R.K., et al. Changing Urban Bureaucracies: How New Practices Become Routinized. Santa Monica, California: Rand Corporation, 1978.

Zaltman, G.; Duncan, R.B.; and Halbek, J. Innovations and Organizations. New York: John Wiley and Sons, 1973.

Esoterica Disseminationem: Looking for Patterns in the Linking Agent's Role

Richard C. Harris, as the Consortium Project Director, has managed the three-year research and service project, culminating with the production of the Consortium Report Series. For the past seven years, Dr. Harris has also served as a trainer and consultant as well as a member of the executive committee at The NETWORK. He has written several articles and reports on educational change and research utilization, and he has consulted with several agencies within the federal government on the relationship between federal policy and local implementation.

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Often as a project is coming to a close, a project director feels compelled to explain why the lack of success of the project or certain of its components should not result in abandonment of the principles that guided the project's development. In this paper, I shall try to do just the opposite -- I have the opportunity (and to be sure the editorial license) to try to explain why things went right.

In this paper I will touch briefly on the planned process that we used in the Consortium, identify some of the early indicators of project success, reflect on four possible reasons for this success, and lay out for consideration a set of partially resolved issues to be considered in future projects using linking agents.

THE CONSORTIUM PLANNING PROCESS

Much has been said in the earlier papers about the linking agent's milestones, the set of linear objectives that the linker attempted to reach at each site. They are included in their entirety along with supporting rationale for each in Appendix A. Essentially, the milestones served as benchmarks in the problem-solving process that the linking agents were to follow in their schools. In addition, the milestones acted as a role description for each linking agent. They also formed the planning framework that each linking agent would use in setting objectives for individual sites. Although we offered target dates for the milestones, we left the final responsibility for planning for and achieving them to the linking agent.

By using this type of structured flexibility, we were able to create a project with key commonalities, even though the linkers worked in such diverse settings as inner-city Minneapolis, suburban California, and rural Kansas. At the close of our project, all project members critiqued the milestones, trying to balance desirability with feasibility. This critique resulted in the following reformulation of the milestones:

1. Select site
2. Form inside program review team
3. Define and document an instructional problem
4. Establish selection criteria for new program selection
5. Select program
6. Complete implementation plan
7. Develop evaluation and monitoring system
8. Train program users
9. Begin classroom implementation
10. Hold interschool (or interdistrict) adopter conference
11. Conduct follow-up training event addressing problems arising during initial implementation
12. Conduct formal evaluation after 1 full year of implementation and decide on next steps.

Assumptions that Guided the Planning Process:

Although each of the milestones in Appendix A is supported by rationale statements, there are in addition four simple assumptions that underlie the entire process. We held these assumptions when we planned the project, but it is safe to say that, having lived with the project for 3 years, the assumptions have much more concrete experience attached to them now.

1. The school day is full. Although this assumption might better be called a truism, many people ignore it when working with schools. Because few school districts will lengthen their school day for the purpose of adopting a new program, understanding the existing requirements of

the school day is necessary for any linking agent, since planning for change includes anticipating the consequences of the time demands that the new program will place. For example, whose valued activities will be sacrificed? Whose time will be encroached upon? Whose schedule will be altered? Rarely does program change come about from filling an empty slot in the school day.

2. Program change takes place during implementation of the new program. This statement appears to be self-evident; however, in fact, there is little in the literature to guide the linking agent as to what to expect and how to plan for implementation. In this context, Gene Hall's work has been very helpful (several of the papers mention that Hall's model provided some indicators of the extent to which the new program change is being accomplished). Nevertheless, this assumption resulted in the inclusion in the milestone list of linking agent role requirements for careful monitoring and evaluation.

3. Schools are problem-solving systems. The field of organizational behavior has given us an important principle of human action: people's behavior is influenced by forces other than what they know. About 7 years ago, we were involved in a project to teach school district administrators "problem-solving." What we learned from this effort was that, generally, they already knew the principles of good problem-solving (e.g., problem analysis, forecasting consequences, action planning). When it came time to make a decision, however, they simply did not use what they knew were good problem-solving techniques because they were influenced by other aspects of the decision-making process. For example, taking the time to do thorough problem analysis often makes the leader look indecisive, and brainstorming alternatives might result in an already unruly faction of the faculty testing the limits of the principal's authority. The environment in which the problem-solving takes place is at least as important as the problem-solving skills of the participants.

   Assuming that schools are problem-solving systems and that people in schools are problem solvers helped us to design our linking agents' interventions with a sensitivity to the fact that the problem-solving process that the linking agent was bringing to the site was likely to be as much of an innovation to the school organization as the program that they would ultimately adopt would be to the classroom. Just as the school day is "full" with activities directed toward worthwhile educational goals, the school organization is "full" in the eyes of its administrators with organizational processes intended to make it function effectively. An important requirement, therefore, for anyone introducing change is to get the attention of already busy people.

4. The linking agent is a temporary participant in a school problem-solving system. Schools are constantly seeking outside help for their problems; for example, they hire polling firms to develop a strategy for getting bond issues passed, and labor and management both hire professional bargainers to represent them during contract negotiations. In this same vein, we conceived of our linking agents as an important external resource for schools in the process of curriculum improvement. The entire milestone list suggests that the intervention has a definite beginning and end and is, therefore, temporary. Within the list, specific activities are planned to highlight the temporary nature of the process. In short, the program was designed not to make the existing school organizational structure more complex, but to alter it slightly in the pursuit of solving a specific curriculum-related problem. Once this goal had been met, it was intended that the intervention end.

INDICATIONS OF SUCCESS

When Consortium linking agents began to work with their schools in the fall of 1976, six linkers spent approximately 1 day per week in each of their schools. In that first year, only two schools dropped out, but they were quickly replaced at the initiative of other local administrators. In addition, another school was closed by administrative fiat, leaving the linking agent and the transferred teachers the task of piecing the program back together in a new school under a new principal. And one other school, under the vascillating leadership of the principal, became dormant for a year until the principal was replaced and participating teachers reinitiated contact with the linking agent. As experimental programs go this seems to be an extraordinarily low attrition rate.

In addition to longevity of participation, a number of other indicators of program success are beginning to show up. For example, one school district is expanding its program from a single junior high school to all four junior high schools. In another school, parent involvement, which started during the formation of the program review team, has infiltrated other aspects of school life. In one state, three districts are planning to continue interdistrict meetings because of the value derived from learning from each other. In a few cases, student achievement data are coming in and pointing to the success of the program.

A school superintendent, in a letter to the director of the agency where one of the linking agents worked, summed up the sense of accomplishment across the entire program:

> "By using a committee composed of staff, administrators, and parents, the linker helped us to identify clearly and to articulate our reading problems over 2 years ago. The process of clarifying our problems was broadbased and involved every teacher in such a way as to give each teacher a stake and ownership in the problem, the process, and now the product. . . .In addition to the commitment of the staff, the process used by the linker involved parents, School Committee members, and administrators -- enough to secure and create the necessary funding, supportive expertise, and community backing. Statistical information and research was applied whenever and wherever necessary to facilitate and to confirm direction. Once the committee identified the problem, agreed upon the goals, and began the screening process, there were virtually no obstacles from any segments of the school community -- only support and commitment to move ahead with the process of adopting a new program. After the program was adopted, the implementation process was very carefully monitored and evaluated with the results very systematically fed back to the appropriate staff and administration in a way that made adjustments almost routine, rather than crises. The monitoring process continues today under the supervision of our own master reading teachers and will continue after our relationship is terminated. . . .(Moreover,) the process used in conjunction with the Reading Program has worked so well and holds the commitment of our best teachers so strongly that I have used it to help alleviate other problems."

ANALYSIS OF SUCCESS

At a time when there is general pessimism in the educational R&D community about the tendency for schools not to apply research results to their problems, it is useful to try to explain how this program could have had such an impact on so many schools in so many diverse settings.

The Linking Agent as Energy Source -- Role Empowerment

Our field researchers have been consistently returning with reports that there is more going on in the Consortium schools than mere problem-solving and program change. The presence of the linking agent has injected an atmosphere of professional development and excitement. Morale has been affected positively in several of our schools. Principals, teachers, and central office staff have credited the linking agent as the key force behind this unanticipated project outcome.

A plausible explanation for this outcome is that the linking agents have acted as role models. There is something engaging about people who are optimistic about their work. There is something even more engaging about a person who is optimistic about your work. School systems, similar to any other organization, often find themselves the victim of widespread repressed energy -- energy that contributes to disaffection and decreased commitment. In several of our schools, the presence of the linking agents, and the work that they did, seems to have turned this repressed energy into a positive force for curriculum improvement.

A second and complementary explanation for the improvement of climate in Consortium schools is that the presence of the linker released another kind of energy -- the energy of the staff in meetings. Principals who have more position power than teachers or parents tend to dominate meetings not only because they think they have to, but because the other participants (i.e., teachers and parents) think that they should. With the linking agent in charge of certain staff meetings, the principal was relieved of the responsibilities of his/her role and allowed to participate as one of the group. Several have said that this aspect of their work with the linking agent was particularly rewarding. Other group members also benefited from this role change as they were able to interact with the principal on more equal footing. For the moment, their ideas were as important as those of the principal, providing for energy to be channeled toward problems shared by all. This is the principle of power equalization, which, in theory, suspends the position power of individuals in favor of the idea power of the group; in the process, the commitment of individuals to work out the problem at hand is increased. Not only has this phenomenon benefited immediate problems, it seems to have had long-range benefits that we are still learning about.

The Linking Agent as Trusted Access to Research-Related Resources -- Role Credibility

One of the things that has made the school community particularly wary of the educational R&D community is the self-righteous attitude that accompanies much research. The fact that this self-righteousness is directed sometimes at both schools and fellow researchers, further undermines the credibility of the source.

In the wake of a generalized mistrust about the credibility of research, it is not surprising that school administrators and teachers turn to sources they feel they can trust in spite of the fact that such sources may not be sanctioned by the research community. There are, of course, other explanations for why schools do not readily use research: simplistic assumptions about the transformability of research findings into practice and a storage and retrieval system for a good amount of the research (the ERIC system) which is foreign to school people, to name two.

This is not to suggest that research has nothing to offer schools. All too often Star Wars readers and Donny and Marie word attack packs are developed with a market in mind, but not a learning theory. It is to suggest, however, that the transfer of research-based resources is not simply a matter of creating products that fill voids.

When our linking agents began their work with schools, one of the first requirements was that they establish through their activities mutual trust. This type of relationship then served them well in ferreting out problems and helping their problem-solving groups open up and discuss sensitive issues. It is fairly commonly understood that consultants who establish trusting relationships help develop in their clients a commitment to problem-solving.

Those trusting relationships might just as easily result in a more favorable disposition toward the resource base. With the linking agent at the access point to the resource base, the client is assured (if only psychologically) of quality control. (Would the linking agent sell us down the river after all we've been through together?) The linking agent can also demythologize esoteric retrieval systems whether they be the ERIC system or, in our project's case, a notebook of product descriptions. It seems, in short, that accessing the research resource base is a risk for many clients and the linking agent's credibility helped make that risk palatable.

This is an important observation, for if it is generally true, then resource bases, if they purport to be anything more than archives, must attend to the development of trusted access channels for their users. Conversely for resource bases which are now being under used, we may look for causes in places other than the intransigence of its potential user group or the accuracy of its descriptors.

The Linking Agent as Negotiator -- Role Legitimacy

We expected from the start that the linking agent would be the manager of a curriculum improvement program that required internal group problem-solving, careful planning, and judicious use of outside resources. We also acknowledged that, unlike traditional managers, they would have no line authority in the systems that they were working in. The problem for our linking agents, then, was how to get school members to accept the fact that part of the linking agent's job would be one of holding the internal decision-makers accountable to their own plans.

Thus, in addition to role empowerment and role credibility, another aspect contributing to the linking agent's success was role legitimization. They negotiated with the schools for their legitimacy, using their time, the promise of approximately $5000, and their dedication as their negotiating currency. Five thousand dollars is not all that much money by school standards, suggesting that time and dedication are viewed as important resources for collaborating with schools on improvement programs. The schools appeared to be willing to give up some of their power to gain access to the linking agent's resources.

The Linking Agent as Decision-Maker -- Role Flexibility

As was mentioned previously, the role of the linking agent in this particular program was determined to a large extent by the milestones that were created for them and refined by them. The milestones were used in reporting progress, guiding planning, and anticipating problems. At the same time, linking agents have said that they did not feel overly constrained by the milestones. For instance, in one state the linking agent gave the total responsibility for problem identification to the site. She knew from the milestones list at what point this needed to be done, but was given the flexibility to experiment with linker-intensity in the problem identification process.

Because the milestones provided both for structure and flexibility, we can infer that the role of the linking agent was also structured enough to be recognizable throughout the program but flexible enough to allow linking agents to exercise their own professional judgment about specific strategies and tactics. The linking agents valued this flexible structure because it provided them a sense of their own progress, but it gave them the freedom to make contingency decisions about their sites on an individual basis.

Other factors

As described above, the role of the linking agent has been central to the success of the Consortium project. However, to avoid sounding as though we have invented that which every educational reformer had previously failed to invent -- the complete school improvement kit -- it is important to discuss two aspects of the context of the Consortium project.

First, we limited our work with schools on curriculum improvement to the area of reading. Other research-based resources obviously exist for other curricular areas as well; but all programs are limited by their base of support and we chose with our funding to limit ourselves to reading (a nontrivial problem area in education today, nonetheless).

Our approach, therefore, reflects some implicit values about educational reform that are not universally shared. For example, we did not question the need to teach reading at all. Nor did we assume that, with the technological advances being made today, coupled with an impending energy shortage, schooling as we currently know it may not exist in 20 years. Although these are legitimate concerns, our concerns were to see if we could demonstrate improvement within existing structures. We have learned that incremental change is possible, and, for those children who will continue to be in schools before the current educational system becomes obsolete, these increments can have a positive effect. Clearly, our hopes for change were not as grandiose as those of the 60's. However, they are perhaps more realistic, and probably more appropriate.

Second, one of the ironies of consulting of any type is that, although you can be held accountable for the negative consequences of your work, rarely can you be given credit for the achievements that follow your work. So it is with the Consortium project. We can trace program change across the spectrum of schools that have been working with us, but it would be presumptuous to assert that this success was the sole result of the flexibility of the linking agent's role or his/her ability to infuse a situation with energy. The fact that we were working with schools that were ready for change was partly responsible for project success. The schools and districts selected for or volunteering for participation in the Consortium, at a minimum, had recognized problems in the area of reading; our linkers were able to make the most of that recognition throughout the life of the project.

IMPLICATIONS FOR FUTURE, SIMILARLY STRUCTURED PROJECTS

When coming to the end of a successful project, there is often the temptation to offer remedies for the future. This project, however, seems to have lent itself, not to solutions, but to the identification of dilemmas to be resolved in the design of future programs in which linking agents play a major role. Several of these issues are discussed in the remainder of this paper.

Role prescription versus role emergence for linkers

The Consortium may be thought of as an organization that was based on the collective experience of six organizations. In this sense, the role description that emerged for the linking agents was not one that was built for them; rather it was built with them and incorporated, if not their own experience, the experience and perspective of their respective agencies. In fact, the milestones that we ended the project with are not the same as those that we started with: they went through three major revisions.

For future efforts involving a group problem-solving process, long-range planning, and resource linkage, the milestones (as they have been refined) will probably provide an important starting point. However, the milestones would probably lose their usefulness quickly if those who were being held accountable to achieving them were not given some ongoing opportunity to participate in their redefinition.

People-intensive linkage versus function-intensive linkage

A second important issue arises from the fact that we created a program that was people-intensive. Linking agents worked an average of 1 day per week per school in each of our states. Allowing for maturation of our process and reduction of our rather heavy reporting requirements perhaps we could increase the ratio to eight schools per linker for 2 years with the possibility of outreach in the third year to an additional 16-24 schools (2-3 per participating district). At that rate, with 16,000 school districts in the country, it would take 6,000 person-years to reach every school district with the type of intensive linkage provided by the Consortium.

Knowing that something will cost money generally makes educators uneasy and wary. It is tempting therefore to look for cost-saving strategies and one obvious place would be in the routinization of linkage functions. The logic would be that, if labor-intensive linkage was too expensive, the functions of that person could be routinized and codified, such that linking agents need not be hired.

Clearly there is a logical dilemma here: if all human endeavor were able to be reduced to a set of routinized functions there would be no need for human endeavor. At a less philosophical level, we have noted how the presence of the linking agent, separate from the functions that the linker performed, acted as a source of energy for the school. Routinization and codification may undermine the benefits derived from the presence of a person empowered to make contingent decisions.

On the other hand, our linking agents have benefited from various types of codified problem solving procedures. Their work is not solely the work of artisans, kept secret from the uninitiated. It is conceivable that some amount of further codification of the linking agent role would save money and make the process more efficient.

Future experimentation with the role of the linking agent might be directed toward testing the limits of routinization. Our experience would suggest the following hypothesis: as linkage functions become routinized beyond a certain level, resource utilization will decline. A second hypothesis would be that, as linkage functions are individualized (i.e., left to the discretion of the individual linker) beyond a certain level, resource utilization will become idiosyncratic. Finding and describing an appropriate zone of routinization would go a long way toward depolarizing the ongoing argument between those concerned with costs and those concerhed with effectiveness.

Working with the ready versus working with the needy

There is a fairly widespread assumption in the dissemination community that certain school districts by virtue of their size, entrepreneurial leadership, or tax base seem to get more than their share of the resources. The schools that really need help are not the ones standing in line line trying to get it. In resource utilization as in the society in general, the conventional wisdom goes, the rich keep getting richer. On more than one occasion in our project we were faced with the accusing question: are you working with those who are merely ready, or are you working with those who really need your help? In grappling with the question we discovered that to greater and lesser degrees, we were working with schools that were both open to outside resources (ready) and currently dealing with a real documented problem (needy). Rather than assume that schools are either ready or needy, it is probably more accurate to think of them as two-dimensional:

	not needy	needy
ready	III	II
not ready	IV	I

The table suggests that schools in the first quadrant are needy by some set of objective standards, but they express no readiness for outside resources. Taken to an extreme, these schools and districts are the ones that are not complying with existing laws. On a day-to-day basis, they are not serving the needs of their students as well as they might, given available information and resources . Schools in the second quadrant are both ready and in need of help. For the most part, these were the type of schools that we worked with in the Consortium project.

Schools in the third quadrant are on the lookout for resources in the absence of clearly identified needs. These schools are often labeled opportunistic, and for good reason. In the worst case, they change at the expense of their students. In other situations, however, they can be responsive to changing times and become leaders for others to imitate.

Schools in Quadrant IV are neither in need of outside resources nor ready to take advantage of them. Several of our Consortium schools, after 3 years, may be described in this fashion. They are taking a breather after three years of hard work. Schools that rest too long, of course, become complacent, and, by virtue of inaction, slip from Quadrant IV to Quadrant I.

The table is not intended to gloss over the existence of iniquities. However, thinking of schools as organizations having needs and at a certain state of readiness helps to resolve the political and social implications for linking agents who are often accused of only working with the schools that are ready, not those who really need it. In fact, we have found that Quadrant II schools (those who really need help and who are ready to receive it) were the best clients for linking agents. Those that were neither ready nor needy appeared somewhat bewildered at the problem-solving orientation of our linking agents; those that had experience taking advantage of outside resources but who were not particularly in need found the linking agent overly obtrusive; and those who, by outside standards, had a need but were not ready for assistance offered the linker the greatest overt resistance.

Stated another way, the linking agent can play an important role in the school that has both needs and an openness to outside help. Those schools that have needs but resist outside help are increasingly the targets of another type of change strategy -- legislatively mandated reform. Schools with neither immediate needs nor readiness for external resources are in a class all to themselves. And opportunists will always be opportunists. For the most part, our linkers looked for readiness; they did not try to create it. They also looked for need. Where they found both, we have had highly successful programs.

CONCLUSION

We have found over the course of the project that working with schools in a collaborative fashion does not have to be a seat-of-the-pants operation. We have learned that it is possible to set objectives for collaboration (in our case it was the milestones) that make the school a partner in program improvement.

The role that the linking agent has played throughout the project has been central to our work, but still one for which all the answers are far from spelled out. In this paper I have tried to show how certain aspects of the role -- empowerment, credibility, legitimacy, and flexibility -- contributed to our linking agents' successes with their sites. Obviously there is more to be learned about each of these aspects. In addition, there are several dilemmas about the role yet to be resolved. I have shared our current thinking on some of them: role prescription vs role emergence, people-intensive vs function-intensive linkage, and working with the ready vs working with the needy.

In the introduction to this book, it was pointed out that the problems confronting education today are not solving themselves. In fact, they are compounding. Rather than bemoan this fact of life, perhaps it would be better to accept it and recognize that there will always be problems to solve. Our experience has shown that the linking agent who couples skill in setting up temporary problem-solving systems with access to resources has much to offer to today's beleaguered (and sometimes besieged) school systems.

APPENDIX A

Consortium Linking Agent Milestones and Supporting Rationale

Milestone #1: Identify a single school building within a participating district as a target for Linking Agent activities.

Assumption: A single school building is a manageable unit.

Assumption: Most districts have the type of flexibility in their curriculum to allow program change to take place in a single building.

Assumption: A single building could act as a demonstration site for other buildings in a large district.

Milestone #2: Conduct interviews with up to 12 staff members of the participating school.

Assumption: Individual interviews with a variety of staff give the Linking Agent a chance to hear several perspectives about the school.

Assumption: Individual interviews with a variety of staff help to identify significant others in the school.

Assumption: Individual interviews help to build the Linking Agent's credibility with a broad spectrum within the school.

Milestone #3: Constitute a Multi-Constituent Group (MCG), representative of a cross-section of the school community. The group's charge would be to participate in a group problem-solving process, beginning with problem identification and leading to the development of an implementation plan for an R&D outcome.

Assumption: A Multi-Constituent Group during problem identification will create the possibility of greater acceptance of solutions during implementation and result in less need to "sell" the solution to the implementers.

Assumption: There will be enough flexibility in the problem-solving process to allow for district variations. That is, if a district makes most of its decisions at the superintendent level, the group's role could be advisory; in districts where decisions are decentralized the group's role could be decision making.

Milestone #4: Help the MCG define and document a problem in the area of reading for which the school needs help.

Assumption: There will be sufficient expertise in the group to define a problem in the area of reading.

Assumption: The Linking Agent will have the requisite skill to help groups focus on problem identification as distinct from solution generation.

Assumption: Research and development outcomes exist in the form of research reports, articles, training packages, etc. to aid the problem identification process.

Milestone #5: Help the MCG establish criteria for selection of an R&D outcome to help solve the problem identified at Milestone #4.

Assumption: An R&D outcome exists for most problems that MCGs would identify.

Assumption: Resources exist to help Linking Agents help their groups establish criteria for product or program selection.

Milestone #6: Help the MCG select an R&D outcome to solve their problem.

Assumption: Sufficient information about R&D products exists to allow for informed product selection.

Milestone #7: Help the MCG complete an implementation plan for the new product or program.

Assumption: Planning for implementation is the best way to avoid aborted implementation attempts.

Assumption: Pitfalls in implementation can be planned for and avoided.

Assumption: The best way for a Linking Agent to give technical assistance is not to wait until assistance is needed, but to be ready to give it because it has been planned.

Milestone #8: Insure the design and delivery of teacher training appropriate to the new program or product selected.

Assumption: Successful implementation of any new program or product will be helped by careful training of teachers.

Milestone #9: Insure that teachers initiate a trial period with the new program (6-8 weeks).

Assumption: Some sort of carefully monitored trial period will give teachers the assurance that help and resources are available in the event that there are peculiar snags with the program.

Assumption: Embarking on a carefully controlled trial period will limit the number of self-oriented adaptations (those that make the teacher's job easier, but which compromise the integrity of the program) and give the implementing teachers a fair chance to experience the program as an alternative to their current approach.

Assumption: Expertise exists within the MCG to monitor the trial period.

Milestone #10: Help the MCG achieve closure on the trial period, evaluate the results, and revise their implementation plan.

Assumption: Any program requires modifications for successful implementation. This evaluation will allow for those modifications to be made in a way that will make maximum use of the implementing teachers' experience.

Assumption: Implementation schedules will need to be changed after an adopting site has its own experience with a new program.

Assumption: The revision process is important to the successful development of ownership in the program.

Milestone #11: Help the MCG and school staff begin a full-scale adoption of the program.

Assumption: The MCG and those teachers involved in an adoption will need help translating their plans for implementation into action in the classroom.

Assumption: Ongoing adaptations between an adopted program and particular classroom realities are expected. Teachers will need support and assistance in the process.

Milestone #12: Help the MCG develop a long-range evaluation and monitoring system.

Assumption: It is important that the MCG, teachers, and students know the effects of their activities.

Assumption: It will be possible in the long run to assess the effects of the program both in terms of satisfaction of the implementers and in terms of student outcomes.

Assumption: Someone inside the system must be assigned responsibility for insuring that the implementation plan is adhered to.

Assumption: The Linking Agent will still play an important role in working with the inside monitor.

Milestone #13: Conduct the first statewide networking conference among participating schools in The Consortium during implementation.

Assumption: Giving the implementers the responsibility to share what they are learning with their peers is an important motivator in insuring that they not let their implementation atrophy.

Assumption: Networking conferences reinforce in the participants the importance of what they are doing in their individual sites.

Assumption: Peer teaching is valid teaching.

Milestone #14: Conduct a second statewide networking conference.

Assumption: Follow-up on the first statewide networking conference will reinforce connections between peers, provide an opportunity for reviewing progress and related learnings, and will reinforce project identity.

Milestone #15: Conduct a "one year later" MCG implementation review and recharge session.

Assumption: Early evaluation data will be available to the MCG one year from the time that implementation starts.

Assumption: The implementation team and/or the MCG will need outside help in planning for the implications of this evaluation.

Milestone #16: Terminate the Linking Agent's direct involvement with the site.

Assumption: There will come a point in the life of the project when the specific problem will either be solved or lessened in importance.

Assumption: Enough time will have elapsed to insure that the transition will be smooth.

Assumption: The Linking Agent will have been spending time during the year building the capacity of the site (the MCG, the implementation team, the inside monitor) to cope with future problems as they emerge, either in reading or in other areas of the curriculum -- perhaps in other areas of school life.

The Consortium Report Series (continued from inside front cover)

The Consortium Report Series (see Box) synthesizes the conclusions and hunches from what has been a rather ambitious undertaking:

- thirty schools experimenting with group problem solving
- thirty schools implementing curriculum improvements under the scrutiny of linking agents and outside researchers
- six linking agents developing as they went a role heretofore idealized but not too well specified.

Publications in the Consortium Report Series

Case Studies in Program Improvement

Over the life of the project, The Consortium employed external researchers to develop case studies of six schools. These cases are published in this volume with an analysis of the common themes that were identified across the six cases.

The "Inside" Outsiders: A Study of Three Consortium Linking Agents

In this publication, studies of three project linking agents analyze their prior experiences, document their work, and explain how Consortium linking agents became an important partner in school improvement.

Reflections on the Experience of Educational Linking Agents

This publication contains observations on a variety of aspects of the linking agent's role, from beginning work with a school or district through problem identification and planning to eventual disengagement. Papers were written by linking agents and their supervisors.

Linking Agent's Tool Kit

The "Tool Kit" is a set of readings and tools that linking agents can use when consulting with schools. It is intended as a resource for linkers, but could be useful for school-based planners who are contemplating working with a linking agent or those who would like to follow a rational problem solving process on their own.

The Consortium Project: A Study of Interorganizational Collaboration

The final report presents a history of the three year project and summarizes learnings about the advantages and disadvantages of temporary linkage systems, effective management and support structures for linkers, and the consequences of conducting a combined research and service project.

The Report Series, like the project, is experimental, some of the reports being prepared by outside research teams, others prepared by the linkers themselves, and still others a blend of the two approaches. All in all, the Series attempts to capture the essence of an experimental project from a variety of perspectives in order to inform and perhaps stimulate others faced with similar conditions.

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September 1979

Washington State Facilitator Project
Yakima Public Schools
Yakima, Washington

Far West Laboratory for
Educational Research and Development
San Francisco, California

The NETWORK has been promoting growth and change in educational organizations since 1969. All NETWORK programs offer on-site, in-person services and emphasize local needs assessment, effective use of existing resources, formative evaluation for program improvement, and local curriculum development and problem-solving skills.

The NETWORK also contracts with local school districts and other educational agencies to provide assistance in such areas as staff development, evaluation, management skills, career education, and the development of individualized educational programs (IEPs) for special needs students.

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